

Turkey

By 100



Marine Biological Laboratory Library
Woods Hole, Massachusetts

VOYAGES · OF · EXPLORATION



Collected
by

NEWCOMB THOMPSON MONTGOMERY
(1907-1986)

*Philadelphia architect, nephew of
Thomas Harrison Montgomery (1873-1912),
MBL investigator, and Priscilla Braislin
Montgomery (1874-1956), MBL librarian.*

*Gift of their sons Hugh Montgomery, M.D.
and Raymond B. Montgomery - 1987.*

V O Y A G E

TO THE

PACIFIC

OF THE

THE COMMAND OF THE NAVY

OF THE

Discoveries in the Northern Hemisphere

BY

The Honorable the Lords of the Admiralty

in Answer to a Resolution of the House of Commons

Passed in the Year 1795

By the Honorable the Lords of the Admiralty

Ordered by the House of Commons

To be Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

Printed by the Stationers

A
V O Y A G E
TO THE
P A C I F I C O C E A N.

UNDERTAKEN,
BY THE COMMAND OF HIS MAJESTY,
FOR MAKING
Discoveries in the Northern Hemisphere.

TO DETERMINE
The POSITION and EXTENT of the WEST SIDE of NORTH AMERICA;
its DISTANCE from ASIA; and the PRACTICABILITY of a
NORTHERN PASSAGE to EUROPE.

PERFORMED UNDER THE DIRECTION OF
Captains COOK, CLERKE, and GORE,
In his MAJESTY'S Ships the RESOLUTION and DISCOVERY.
In the Years 1776, 1777, 1778, 1779, and 1780.

IN THREE VOLUMES.

VOL. I. and II. written by Captain JAMES COOK, F.R.S.

VOL. III. by Captain JAMES KING, LL.D. and F.R.S.

Illustrated with MAPS and CHARTS, from the Original Drawings made by Lieut. HENRY ROBERTS,
under the Direction of Captain COOK; and with a great Variety of Portraits of Persons, Views
of Places, and Historical Representations of Remarkable Incidents, drawn by Mr.
WEBBER during the Voyage, and engraved by the most eminent Artists.

Published by Order of the Lords Commissioners of the Admiralty.

V O L. III.

L O N D O N:

PRINTED BY W. AND A. STRAHAN:
FOR G. NICOL, BOOKSELLER TO HIS MAJESTY, IN THE STRAND,
AND T. CADELL, IN THE STRAND.

MDCCLXXXIV.

V O Y A G E

P A C I F I C O C E A N

BY THE COMMAND OF HER MAJESTY

Discovered in the Northern Hemisphere

THE POSITION AND EXTENT OF THE WEST SIDE OF NORTH AMERICA
IN DISTANCE FROM ASIA, AND THE PROBABILITY OF A
NORTHWEST PASSAGE TO EUROPE

By JAMES COOK, ESQ. FIRST AND SECOND VOYAGES

IN THE YEARS 1769, 1770, 1771, 1772, 1773, AND 1774

BY JAMES COOK, ESQ. FIRST VOYAGE

IN THE YEARS 1769, 1770, 1771, 1772, 1773, AND 1774

BY JAMES COOK, ESQ. SECOND VOYAGE

IN THE YEARS 1771, 1772, 1773, 1774, 1775, AND 1776

BY JAMES COOK, ESQ. THIRD VOYAGE

IN THE YEARS 1776, 1777, 1778, 1779, 1780, AND 1781

C O N T E N T S

OF THE

T H I R D V O L U M E.

B O O K V.

Captain King's Journal of the Transactions on returning
to the Sandwich Islands.

C H A P. I.

*D*escription of Karakakooa Bay.—Vast Concourse of the Natives.—
Power of the Chiefs over the inferior People.—Visit from Koah, a
Priest and Warrior.—The Morai at Kakooa described.—Ceremonies
at the Landing of Captain Cook.—Observatories erected.—Powerful
Operation of the Taboo.—Method of salting Pork in tropical Climates.
—Society of Priests discovered.—Their Hospitality and Munificence.
—Reception of Captain Cook.—Artifice of Koah.—Arrival of Ter-
reeoboo, King of the Island.—Singular Ceremony.—Visit from the
King.—Returned by Captain Cook. Page 1

C O N T E N T S.

C H A P. II.

Farther Account of Transactions with the Natives.—Their Hospitality.—Propensity to Theft.—Description of a Boxing Match.—Death of one of our Seamen.—Behaviour of the Priests at his Funeral.—The Wood Work and Images on the Morai purchased.—The Natives inquisitive about our Departure.—Their Opinion about the Design of our Voyage.—Magnificent Presents of Terrecoboo to Captain Cook.—The Ships leave the Island.—The Resolution damaged in a Gale, and obliged to return.

20

C H A P. III.

Suspicious Behaviour of the Natives, on our Return to Karakakooa Bay.—Theft on board the Discovery, and its Consequences.—The Pin-nace attacked, and the Crew obliged to quit her.—Captain Cook's Observations on the Occasion.—Attempt at the Observatory.—The Cutter of the Discovery stolen.—Measures taken by Captain Cook for its Recovery.—Goes on Shore, to invite the King on board.—The King being stopped by his Wife, and the Chiefs, a Contest arises.—News arrives of one of the Chiefs being killed by one of our People.—Ferment on this Occasion.—One of the Chiefs threatens Captain Cook, and is shot by him.—General Attack by the Natives.—Death of Captain Cook.—Account of the Captain's Services, and a sketch of his Character.

35

C H A P. IV.

Transactions at Owwhybee, subsequent to the Death of Captain Cook.—Gallant Behaviour of the Lieutenant of Marines.—Dangerous Situation of the Party at the Morai.—Bravery of one of the Natives.—Consultation respecting future Measures.—Demand of the Body of Captain Cook.—Evasive and insidious Conduct of Koah, and the Chiefs.—Insolent Behaviour of the Natives.—Promotion of Officers.—Arrival of two Priests with Part of the Body.—Extraordinary Behaviour

C O N T E N T S.

Behaviour of two Boys.—Burning of the Village of Kakooa.—Unfortunate Destruction of the Dwellings of the Priests.—Recovery of the Bones of Captain Cook.—Departure from Karakakooa Bay. 53

C H A P. V.

Departure from Karakakooa in Search of an Harbour on the South East Side of Mowee.—Driven to Leeward by the Easterly Winds and Current.—Pass the Island of Tahoorowa.—Description of the South West side of Mowee.—Run along the Coasts of Ranai and Morotoi to Woahoo.—Description of the North East Coast of Woahoo.—Unsuccessful Attempt to water.—Passage to Atooi.—Anchor in Wymoa Bay.—Dangerous Situation of the Watering Party on Shore.—Civil Dissentions in the Islands.—Visit from the contending Chiefs.—Anchor off Oneeheow.—Final Departure from the Sandwich Islands. 83

C H A P. VI.

General Account of the Sandwich Islands. Their Number, Names, and Situation.—OWHYHEE.—Its Extent, and Division into Districts.—Account of its Coasts, and the adjacent Country.—Volcanic Appearances.—Snowy Mountains.—Their Height determined.—Account of a Journey into the interior Parts of the Country.—MOWEE.—TAHOOROWA.—MOROTOI.—RANAI.—WOAHOO.—ATOOI.—ONEEHEOW.—OREEHOUA.—TAHOORA.—Climate.—Winds.—Currents.—Tides.—Animals and Vegetables.—Astronomical Observations. 100

C H A P. VII.

General Account of the Sandwich Islands continued.—Of the Inhabitants.—Their Origin.—Persons.—Pernicious Effects of the Ava.—Numbers.—Disposition and Manners.—Reasons for supposing them not Cannibals.—Dress and Ornaments.—Villages and Houses.—Food.—Occupations and Amusements.—Addicted to Gaming.—Their extraordinary

C O N T E N T S.

ordinary Dexterity in Swimming.—Arts and Manufactures.—Curious Specimens of their Sculpture.—Kipparee, or Method of painting Cloth.—Mats.—Fishing Hooks.—Cordage.—Salt Pans.—War-like Instruments. 124

C H A P. VIII.

General Account of the Sandwich Islands continued.—Government.—People divided into three Classes.—Power of Eree-taboo.—Genealogy of the Kings of Owbyhee and Mowee.—Power of the Chiefs.—State of the inferior Class.—Punishment of Crimes.—Religion.—Society of Priests.—The Orono.—Their Idols.—Songs chanted by the Chiefs, before they drink Ava.—Human Sacrifices.—Custom of knocking out the fore Teeth.—Notions with regard to a future State.—Marriages.—Remarkable Instance of Jealousy.—Funeral Rites.

153

B O O K VI.

Transactions during the second Expedition to the North, by the Way of Kamtschatka ; and on the Return Home, by the Way of Canton, and the Cape of Good Hope.

C H A P. I.

Departure from Oneebeow.—Fruitless Attempt to discover MODOOPAPPA.—Course steered for Awatska Bay.—Occurrences during that Passage.—Sudden Change from Heat to Cold.—Distress occasioned by the leaking of the Resolution.—View of the Coast of Kamtschatka.—Extreme Rigour of the Climate.—Lose Sight of the Discovery.—The Resolution enters the Bay of Awatska.—Prospect of the Town of St. Peter and St. Paul.—Party sent ashore.—Their Reception by the Commanding Officer of the Port.—Message dispatched to the Commander at Bolcheretsk.—Arrival of the Discovery.—Return of

C O N T E N T S.

the Messengers, from the Commander.—Extraordinary Mode of travelling.—Visit from a Merchant, and a German Servant belonging to the Commander. 171

C H A P. II.

Scarcity of Provisions and Stores at the Harbour of St. Peter and St. Paul.—A Party set out to visit the Commander at Bolcheretsk.—Passage up the River Awatska.—Account of their Reception by the Toion of Karatchin.—Description of a Kamtschadale Dress.—Journey on Sledges.—Description of this Mode of Travelling.—Arrival at Natcheechin.—Account of hot Springs.—Embark on the Bolchoireka.—Reception at the Capital.—Generous and hospitable Conduct of the Commander and the Garrison.—Description of Bolcheretsk.—Presents from the Commander.—Russian and Kamtschadale Dancing.—Affecting Departure from Bolcheretsk.—Return to St. Peter and St. Paul's, accompanied by Major Behm, who visits the Ships.—Generosity of the Sailors.—Dispatches sent by Major Behm to Petersburg.—His Departure and Character. 196

C H A P. III.

Continuation of Transactions in the Harbour of St. Peter and St. Paul.—Abundance of Fish.—Death of a Seaman belonging to the Resolution.—The Russian Hospital put under the Care of the Ship's Surgeons.—Supply of Flour and Cattle.—Celebration of the King's Birth-day.—Difficulties in sailing out of the Bay.—Eruption of a Volcano.—Steer to the Northward.—Cheepoonskoi Nofs.—Errors of the Russian Charts.—Kamtschatzkoi Nofs.—Olutorskoi Nofs.—Tschukotskoi Nofs.—Island of St. Laurence.—View, from the same Point, of the Coasts of Asia and America, and the Islands of St. Diomed.—Various Attempts to get to the North, between the two Continents.—Obstructed by impenetrable Ice.—Sea-horses and white Bears killed.—Captain Clerke's Determination, and future Designs. 228

C O N T E N T S.

C H A P. IV.

Fruitless attempts to penetrate through the Ice to the North West.—Dangerous Situation of the Discovery.—Sea-horses killed.—Fresh Obstructions from the Ice.—Report of Damages received by the Discovery.—Captain Clerke's Determination to proceed to the Southward.—Joy of the Ship's Crews on that Occasion.—Pass Serdze Kamen.—Return through Beering's Straits.—Inquiry into the Extent of the North East Coast of Asia.—Reasons for rejecting Muller's Map of the Promontory of the Tschutski.—Reasons for believing the Coast does not reach a higher Latitude than $70^{\circ} \frac{1}{2}$ North.—General Observations on the Impracticability of a North East, or North West Passage from the Atlantic into the Pacific Ocean.—Comparative View of the Progress made in the Years 1778 and 1779.—Remarks on the Sea, and Sea-coasts, North of Beering's Straits.—History of the Voyage resumed.—Pass the Island of St. Laurence.—The Island of Mednoi.—Death of Captain Clerke.—Short Account of his Services.

255

C H A P. V.

Return to the Harbour of St. Peter and St. Paul.—Promotion of Officers.—Funeral of Captain Clerke.—Damages of the Discovery repaired.—Various other Occupations of the Ships Crews.—Letters from the Commander.—Supply of Flour and Naval Stores from a Russian Galliot.—Account of an Exile.—Bear-hunting and Fishing Parties.—Disgrace of the Serjeant.—Celebration of the King's Coronation Day, and Visit from the Commander.—The Serjeant reinstated.—A Russian Soldier promoted at our Request.—Remarks on the Discipline of the Russian Army.—Church at Paratounca.—Method of Bear-hunting.—Farther Account of the Bears and Kamtschadales.—Inscription to the Memory of Captain Clerke.—Supply of Cattle.—Entertainments on the Empress's Name Day.—Present from

C O N T E N T S.

from the Commander.—Attempt of a Marine to desert.—Work out of the Bay.—Nautical and Geographical Description of Awatska Bay.—Astronomical tables, and Observations. 283

C H A P. VI.

General Account of Kamtschatka.—Geographical Description.—Rivers.—Soil.—Climate.—Volcanos.—Hot Springs.—Productions.—Vegetables.—Animals.—Birds.—Fish. 325

C H A P. VII.

General Account of Kamtschatka continued—Of the Inhabitants.—Origin of the Kamtschadales,—Discovered by the Russians.—Abstract of their History.—Numbers.—Present State—Of the Russian Commerce in Kamtschatka—Of the Kamtschadale Habitations and Drefs.—Of the Kurile Islands.—The Koreki.—The Tschutski. 359

C H A P. VIII.

Plan of our future Proceedings.—Course to the Southward, along the Coast of Kamtschatka.—Cape Lopatka.—Pass the Islands Shoomska and Paramousir.—Driven to the Eastward of the Kuriles.—Singular Situation with respect to the pretended Discoveries of former Navigators.—Fruitless Attempts to reach the Islands North of Japan.—Geographical Conclusions.—View of the Coast of Japan.—Run along the East Side.—Pass two Japanese Vessels.—Driven off the Coast by contrary Winds.—Extraordinary Effect of Currents.—Steer for the Bashees.—Pass large Quantities of Pumice Stone.—Discover Sulphur Island.—Pass the Pratas.—Isles of Lema, and Ladron Island.—Chinese Pilot taken on board the Resolution.—Journals of the Officers and Men secured. 384

C H A P. IX.

Working up to Macao.—A Chinese Comprador.—Sent on Shore to visit the Portuguese Governor.—Effects of the Intelligence we received

C O N T E N T S.

from Europe.—Anchor in the Tyra.—Passage up to Canton.—Bocca Tygris.—Wampu.—Description of a Sampane.—Reception at the English Factory.—Instance of the suspicious Character of the Chinese.—Of their Mode of trading.—Of the City of Canton.—Its Size.—Population.—Number of Sampanes.—Military Force.—Of the Streets and Houses.—Visit to a Chinese.—Return to Macao.—Great Demand for the Sea-otter Skins.—Plan of a Voyage for opening a Fur Trade on the Western Coast of America, and prosecuting further Discoveries in the Neighbourhood of Japan.—Departure from Macao.—Price of Provisions in China.

419

C H A P. X.

Leave the Tyra.—Orders of the Court of France respecting Captain Cook.—Resolutions in consequence thereof.—Strike Soundings on the Macclesfield Banks.—Pass Pulo Sapata.—Steer for Pulo Condore.—Anchor at Pulo Condore.—Transactions during our Stay.—Journey to the principal Town.—Receive a Visit from a Mandarin.—Examine his Letters.—Refreshments to be procured.—Description, and present State of the Island.—Its Produce.—An Assertion of M. Sonnerat refuted.—Astronomical and Nautical Observations.

447

C H A P. XI.

Departure from Pulo Condore.—Pass the Straits of Banca.—View of the Island of Sumatra.—Straits of Sunda.—Occurrences there.—Description of the Island of Cracatoa.—Prince's Island.—Effects of the Climate of Java.—Run to the Cape of Good Hope.—Transactions there.—Description of False Bay.—Passage to the Orkneys.—General Reflections.

465

A P P E N -

C O N T E N T S.

A P P E N D I X.

No.

- I. *Tables of the Route of the Resolution and Discovery, the Variation of the Compass, and Meteorological Observations, during the Voyage.* 493
- II. *A comparative Table of Numerals, exhibiting the Affinity and Extent of Language, which is found to prevail in all the Islands of the Eastern Sea, and derived from that spoken on the Continent of Asia, in the Country of the Malaya.* fronting 530
- III. *Vocabulary of the Languages of the Friendly Islands.* 531
- IV. *Vocabulary of the Language of Nootka, or King George's Sound.* 542
- V. *Vocabulary of the Language of Atooi, one of the Sandwich Islands.* 549
- VI. *Table to shew the Affinity between the Languages spoken at Oonalashka and Norton Sound, and those of the Greenlanders and Esquimaux.* 554
- VII. *Table of the Variations of the Compass, observed by Captain Cook during his passage from England to the Cape of Good Hope. See Vol. I. p. 49.* 556

E R R A T U M.

Page 13, for Plate No. LXI. read No. LX.

MEMORANDUM

TO : [illegible]
FROM : [illegible]
SUBJECT : [illegible]

[illegible text block]

[illegible text block]

[illegible text block]

[illegible text block]

[illegible text block]

[illegible text block]

[illegible text block]

[illegible text block]

[illegible text block]

[illegible text block]

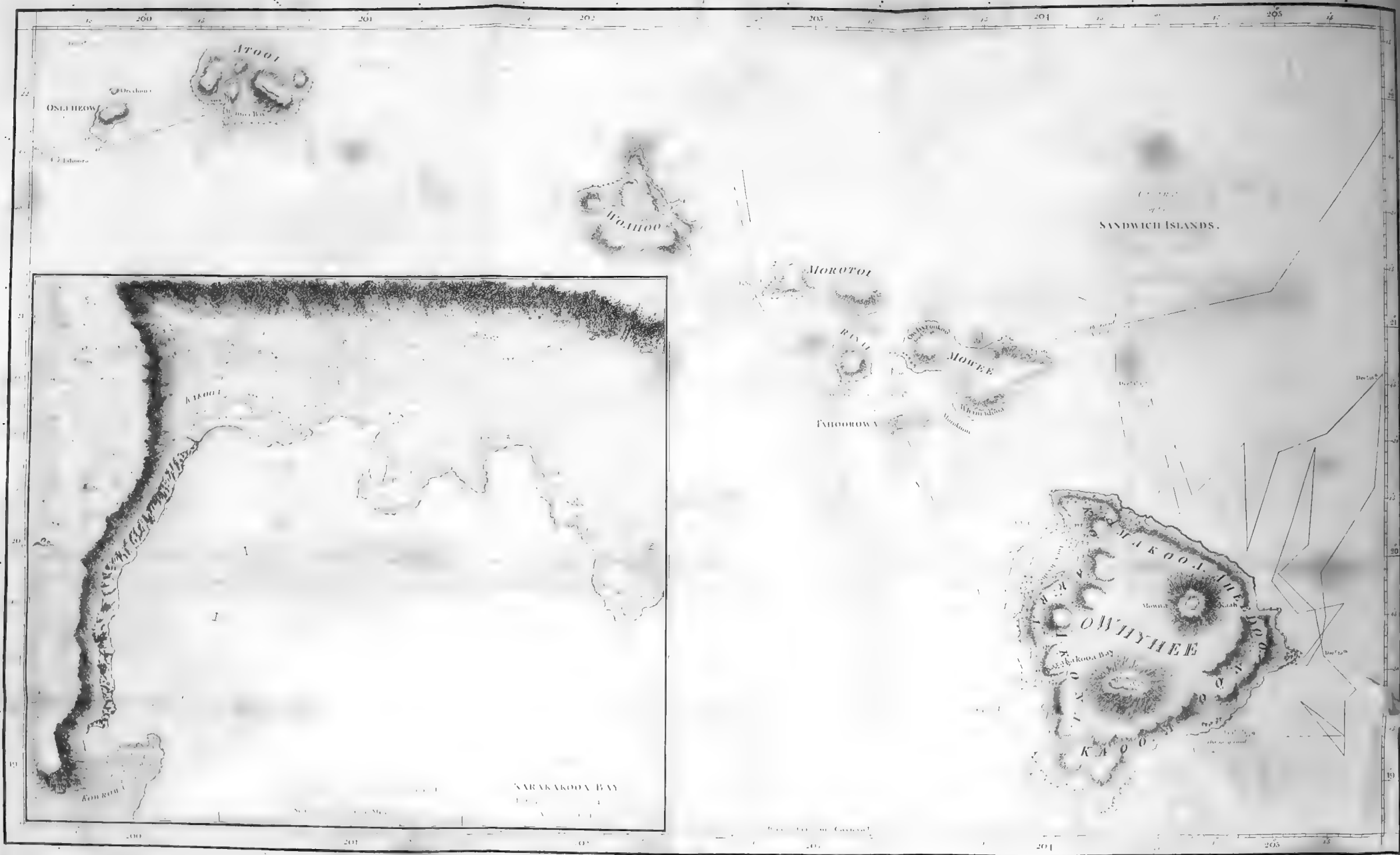
[illegible text block]

[illegible text block]

[illegible text block]

[illegible text block]

[illegible text block]



A
V O Y A G E
TO THE
P A C I F I C O C E A N.

B O O K V.

Captain King's Journal of the Transactions
on returning to the Sandwich Islands.

C H A P. I.

Description of Karakakooa Bay.—Vast Concourse of the Natives.—Power of the Chiefs over the inferior People.—Visit from Koah, a Priest and Warrior.—The Morai at Kakooa described.—Ceremonies at the Landing of Captain Cook.—Observatories erected.—Powerful Operation of the Taboo.—Method of salting Pork in tropical Climates.—Society of Priests discovered.—Their Hospitality and Munificence.—Reception of Captain Cook.—Artifice of Koah.—Arrival of Terreeoboo, King of the Island.—Singular Ceremony.—Visit from the King.—Returned by Captain Cook.

KARAKAKOOA Bay is situated on the West side of the island of Owhyhee, in a district called Akona. It is about a mile in depth, and bounded by two low points of land, at the distance of half a league, and bearing South South East and North North West from each other.

1779.
January.
Sunday 17.

1779.
January.

On the North point, which is flat and barren, stands the village of Kowrowa; and in the bottom of the bay, near a grove of tall cocoa-nut trees, there is another village of a more considerable size, called Kakooa: between them, runs a high rocky cliff, inaccessible from the sea shore. On the South side, the coast, for about a mile inland, has a rugged appearance; beyond which the country rises with a gradual ascent, and is overspread with cultivated inclosures and groves of cocoa-nut trees, where the habitations of the natives are scattered in great numbers. The shore, all round the bay, is covered with a black coral rock, which makes the landing very dangerous in rough weather; except at the village of Kakooa, where there is a fine sandy beach, with a *Morai*, or burying-place, at one extremity, and a small well of fresh water, at the other. This bay appearing to Captain Cook a proper place to refit the ships, and lay in an additional supply of water and provisions, we moored on the North side, about a quarter of a mile from the shore, Kowrowa bearing North West.

As soon as the inhabitants perceived our intention of anchoring in the bay, they came off from the shore in astonishing numbers, and expressed their joy by singing and shouting, and exhibiting a variety of wild and extravagant gestures. The sides, the decks, and rigging of both ships were soon completely covered with them; and a multitude of women and boys, who had not been able to get canoes, came swimming round us in shoals; many of whom, not finding room on board, remained the whole day playing in the water.

Among the chiefs who came on board the *Resolution*, was a young man, called Parcea, whom we soon perceived to be a person of great authority. On presenting himself to

Captain Cook, he told him, that he was *Jakanee* * to the king of the island, who was at that time engaged on a military expedition at Mowee, and was expected to return within three or four days. A few presents from Captain Cook attached him entirely to our interests, and he became exceedingly useful to us in the management of his countrymen, as we had soon occasion to experience. For we had not been long at anchor, when it was observed that the *Discovery* had such a number of people hanging on one side, as occasioned her to heel considerably; and that the men were unable to keep off the crowds which continued pressing into her. Captain Cook, being apprehensive that she might suffer some injury, pointed out the danger to Pareea, who immediately went to their assistance, cleared the ship of its incumbrances, and drove away the canoes that surrounded her.

1779.
January.

The authority of the chiefs over the inferior people appeared, from this incident, to be of the most despotic kind. A similar instance of it happened the same day on board the *Resolution*; where the crowd being so great, as to impede the necessary business of the ship, we were obliged to have recourse to the assistance of Kancena, another of their chiefs, who had likewise attached himself to Captain Cook. The inconvenience we laboured under being made known, he immediately ordered his countrymen to quit the vessel; and we were not a little surprized to see them jump overboard, without a moment's hesitation; all except one man, who loitering behind, and shewing some unwillingness to obey,

* We afterward met with several others of the same denomination; but whether it be an office, or some degree of affinity, we could never learn with certainty.

1779.
January.

Kaneena took him up in his arms, and threw him into the sea.

Both these chiefs were men of strong and well-proportioned bodies, and of countenances remarkably pleasing. Kaneena especially, whose portrait Mr. Webber has drawn, was one of the finest men I ever saw. He was about six feet high, had regular and expressive features, with lively, dark eyes; his carriage was easy, firm, and graceful.

It has been already mentioned, that during our long cruise off this island, the inhabitants had always behaved with great fairness and honesty in their dealings, and had not shewn the slightest propensity to theft; which appeared to us the more extraordinary, because those with whom we had hitherto held any intercourse, were of the lowest rank, either servants or fishermen. We now found the case exceedingly altered. The immense crowd of islanders, which blocked up every part of the ships, not only afforded frequent opportunity of pilfering without risk of discovery, but our inferiority in number held forth a prospect of escaping with impunity in case of detection. Another circumstance, to which we attributed this alteration in their behaviour, was the presence and encouragement of their chiefs; for generally tracing the booty into the possession of some men of consequence, we had the strongest reason to suspect that these depredations were committed at their instigation.

Soon after the Resolution had got into her station, our two friends, Pareca and Kaneena, brought on board a third chief, named Koah, who, we were told, was a priest, and had been, in his youth, a distinguished warrior. He was
a little

a little old man, of an emaciated figure; his eyes exceedingly fore and red, and his body covered with a white leprous scurf, the effects of an immoderate use of the *ava*. Being led into the cabin, he approached Captain Cook with great veneration, and threw over his shoulders a piece of red cloth, which he had brought along with him. Then stepping a few paces back, he made an offering of a small pig, which he held in his hand, whilst he pronounced a discourse that lasted for a considerable time. This ceremony was frequently repeated during our stay at Owhyhee, and appeared to us, from many circumstances, to be a sort of religious adoration. Their idols we found always arrayed with red cloth, in the same manner as was done to Captain Cook; and a small pig was their usual offering to the *Eatooas*. Their speeches, or prayers, were uttered too with a readiness and volubility that indicated them to be according to some formulary.

1779.
January.

When this ceremony was over, Koah dined with Captain Cook, eating plentifully of what was set before him; but, like the rest of the inhabitants of the islands in these Seas, could scarcely be prevailed on to taste a second time our wine or spirits. In the evening, Captain Cook, attended by Mr. Bayly and myself, accompanied him on shore. We landed at the beach, and were received by four men, who carried wands tipped with dog's hair, and marched before us, pronouncing with a loud voice a short sentence, in which we could only distinguish the word *Orono* *. The crowd,

* Captain Cook generally went by this name amongst the natives of Owhyhee; but we could never learn its precise meaning. Sometimes they applied it to an invisible being, who, they said, lived in the heavens. We also found that it was a title belonging to a personage of great rank and power in the island, who resembles pretty much the Delai Lama of the Tartars, and the ecclesiastical emperor of Japan.

which

1779.
January.

which had been collected on the shore, retired at our approach; and not a person was to be seen, except a few lying prostrate on the ground, near the huts of the adjoining village.

Before I proceed to relate the adoration that was paid to Captain Cook, and the peculiar ceremonies with which he was received on this fatal island, it will be necessary to describe the *Morai*, situated, as I have already mentioned, at the South side of the beach at *Kakooa*. It was a square solid pile of stones, about forty yards long, twenty broad, and fourteen in height. The top was flat, and well paved, and surrounded by a wooden rail, on which were fixed the skulls of the captives, sacrificed on the death of their chiefs. In the centre of the area, stood a ruinous old building of wood, connected with the rail, on each side, by a stone wall, which divided the whole space into two parts. On the side next the country, were five poles, upward of twenty feet high, supporting an irregular kind of scaffold; on the opposite side, toward the sea, stood two small houses, with a covered communication.

We were conducted by Koah to the top of this pile by an easy ascent, leading from the beach to the North West corner of the area. At the entrance, we saw two large wooden images, with features violently distorted, and a long piece of carved wood, of a conical form inverted, rising from the top of their heads; the rest was without form, and wrapped round with red cloth. We were here met by a tall young man with a long beard, who presented Captain Cook to the images, and after chanting a kind of hymn, in which he was joined by Koah, they led us to that end of the *Morai*, where the five poles were fixed. At the foot of
them

1779.
January.

them were twelve images ranged in a semicircular form, and before the middle figure, stood a high stand or table, exactly resembling the *Whatta** of Otaheite, on which lay a putrid hog; and under it pieces of sugar-cane, cocoa-nuts, bread-fruit, plantains, and sweet potatoes. Koah having placed the Captain under this stand, took down the hog, and held it toward him; and after having a second time addressed him in a long speech, pronounced with much vehemence and rapidity, he let it fall on the ground, and led him to the scaffolding, which they began to climb together, not without great risk of falling. At this time we saw, coming in solemn procession, at the entrance of the top of the *Morai*, ten men carrying a live hog, and a large piece of red cloth. Being advanced a few paces, they stopped, and prostrated themselves; and Kaireekkea, the young man above-mentioned, went to them, and receiving the cloth, carried it to Koah, who wrapped it round the Captain, and afterward offered him the hog, which was brought by Kaireekkea with the same ceremony.

Whilst Captain Cook was aloft, in this awkward situation, swathed round with red cloth, and with difficulty keeping his hold amongst the pieces of rotten scaffolding, Kaireekkea and Koah began their office, chanting sometimes in concert, and sometimes alternately. This lasted a considerable time; at length Koah let the hog drop, when he and the Captain descended together. He then led him to the images before mentioned, and having said something to each in a sneering tone, snapping his fingers at them as he passed, he brought him to that in the center, which, from its being

* See Captain Cook's former Voyage.

covered

1779.
January.

covered with red cloth, appeared to be in greater estimation than the rest. Before this figure he prostrated himself, and kissed it, desiring Captain Cook to do the same; who suffered himself to be directed by Koah throughout the whole of this ceremony.

We were now led back into the other division of the *Morai*, where there was a space, ten or twelve feet square, sunk about three feet below the level of the area. Into this we descended, and Captain Cook was seated between two wooden idols, Koah supporting one of his arms, whilst I was desired to support the other. At this time, arrived a second procession of natives, carrying a baked hog, and a pudding, some bread-fruit, cocoa-nuts, and other vegetables. When they approached us, Kaireekkea put himself at their head, and presenting the pig to Captain Cook in the usual manner, began the same kind of chant as before, his companions making regular responses. We observed, that after every response, their parts became gradually shorter, till, toward the close, Kaireekkea's consisted of only two or three words, which the rest answered by the word *Orono*.

When this offering was concluded, which lasted a quarter of an hour, the natives sat down, fronting us, and began to cut up the baked hog, to peel the vegetables, and break the cocoa-nuts; whilst others employed themselves in brewing the *ava*; which is done, by chewing it in the same manner as at the Friendly Islands. Kaireekkea then took part of the kernel of a cocoa-nut, which he chewed, and wrapping it in a piece of cloth, rubbed with it the Captain's face, head, hands, arms, and shoulders. The *ava* was

then handed round, and after we had tasted it, Koah and Pareea began to pull the flesh of the hog in pieces, and to put it into our mouths. I had no great objection to being fed by Pareea, who was very cleanly in his person; but Captain Cook, who was served by Koah, recollecting the putrid hog, could not swallow a morsel; and his reluctance, as may be supposed, was not diminished, when the old man, according to his own mode of civility, had chewed it for him.

1779.
January.

When this last ceremony was finished, which Captain Cook put an end to as soon as he decently could, we quitted the *Morai*, after distributing amongst the people some pieces of iron and other trifles, with which they seemed highly gratified. The men with wands conducted us to the boats, repeating the same words as before. The people again retired, and the few that remained, prostrated themselves as we passed along the shore. We immediately went on board, our minds full of what we had seen, and extremely well satisfied with the good dispositions of our new friends. The meaning of the various ceremonies, with which we had been received, and which, on account of their novelty and singularity, have been related at length, can only be the subject of conjectures, and those uncertain and partial: they were, however, without doubt, expressive of high respect on the part of the natives; and, as far as related to the person of Captain Cook, they seemed approaching to adoration.

The next morning, I went on shore with a guard of eight marines, including the corporal and lieutenant, having orders to erect the observatory in such a situation as might best enable me to superintend and protect the waterers, and

Monday 18.

1779.
January.

the other working parties that were to be on shore. As we were viewing a spot conveniently situated for this purpose, in the middle of the village, Pareea, who was always ready to shew both his power and his good will, offered to pull down some houses that would have obstructed our observations. However, we thought it proper to decline this offer, and fixed on a field of sweet potatoes adjoining to the *Morai*, which was readily granted us; and the priests, to prevent the intrusion of the natives, immediately consecrated the place, by fixing their wands round the wall by which it was inclosed.

This sort of religious interdiction they call *taboo*; a word we heard often repeated, during our stay amongst these islanders, and found to be of very powerful and extensive operation. A more particular explanation of it will be given in the general account of these islands, under the article of religion; at present it is only necessary to observe, that it procured us even more privacy than we desired. No canoes ever presumed to land near us; the natives sat on the wall, but none offered to come within the *tabsoed* space, till he had obtained our permission. But though the men, at our request, would come across the field with provisions, yet not all our endeavours could prevail on the women to approach us. Presents were tried, but without effect; Pareea and Koah were tempted to bring them, but in vain; we were invariably answered, that the *Eatooa* and Terreeoboo (which was the name of their king) would kill them. This circumstance afforded no small matter of amusement to our friends on board, where the crowds of people, and particularly of women, that continued to flock thither, obliged them almost every hour to clear the vessel, in order to have
room

THE PACIFIC OCEAN.

II

room to do the necessary duties of the ship. On these occasions, two or three hundred women were frequently made to jump into the water at once, where they continued swimming and playing about, till they could again procure admittance.

1779.
January.

From the 19th to the 24th, when Pareea and Koah left us Tuesday 19. to attend Terreeoboo, who had landed on some other part of the island, nothing very material happened on board. The caulkers were set to work on the sides of the ships, and the rigging was carefully overhauled and repaired. The salting of hogs for sea-store was also a constant, and one of the principal objects of Captain Cook's attention. As the success we met with in this experiment, during our present voyage, was much more complete than it had been in any former attempt of the same kind, it may not be improper to give an account of the detail of the operation.

It has generally been thought impracticable to cure the flesh of animals by salting, in tropical climates; the progress of putrefaction being so rapid, as not to allow time for the salt to take (as they express it) before the meat gets a taint, which prevents the effect of the pickle. We do not find that experiments relative to this subject have been made by the navigators of any nation before Captain Cook. In his first trials, which were made in 1774, during his second voyage to the Pacific Ocean, the success he met with, though very imperfect, was yet sufficient to convince him of the error of the received opinion. As the voyage, in which he was now engaged, was likely to be protracted a year beyond the time for which the ships had been victualled, he was under the necessity of providing, by some such means, for the

1779.
January.

subsistence of the crews, or of relinquishing the further prosecution of his discoveries. He therefore lost no opportunity of renewing his attempts, and the event answered his most sanguine expectations.

The hogs, which we made use of for this purpose, were of various sizes, weighing from four to twelve stone*. The time of slaughtering was always in the afternoon; and as soon as the hair was scalded off, and the entrails removed, the hog was divided into pieces of four or eight pounds each, and the bones of the legs and chine taken out; and, in the larger sort, the ribs also. Every piece then being carefully wiped and examined, and the veins cleared of the coagulated blood, they were handed to the salters, whilst the flesh remained still warm. After they had been well rubbed with salt, they were placed in a heap, on a stage raised in the open air, covered with planks, and pressed with the heaviest weights we could lay on them. In this situation they remained till the next evening, when they were again well wiped and examined, and the suspicious parts taken away. They were then put into a tub of strong pickle, where they were always looked over once or twice a day, and if any piece had not taken the salt, which was readily discovered by the smell of the pickle, they were immediately taken out, re-examined, and the sound pieces put to fresh pickle. This, however, after the precautions before used, seldom happened. After six days, they were taken out, examined for the last time, and being again slightly pressed, they were packed in barrels, with a thin layer of salt between them. I brought home with me some barrels of this pork, which was pickled at Owhyhee in January 1779, and was tasted.

* 14 lb.

by several persons in England about Christmas 1780, and found perfectly sound and wholesome*.

1779-
January.

I shall now return to our transactions on shore at the observatory, where we had not been long settled, before we discovered, in our neighbourhood, the habitations of a society of priests, whose regular attendance at the *Morai* had excited our curiosity. Their huts stood round a pond of water, and were surrounded by a grove of cocoa-nut trees, which separated them from the beach and the rest of the village, and gave the place an air of religious retirement. On my acquainting Captain Cook with these circumstances, he resolved to pay them a visit; and as he expected to be received in the same manner as before, he brought Mr. Webber with him to make a drawing of the ceremony †.

On his arrival at the beach, he was conducted to a sacred building called *Harre-no-Orono*, or the house of *Orono*, and seated before the entrance, at the foot of a wooden idol, of the same kind with those on the *Morai*. I was here again made to support one of his arms, and after wrapping him in red cloth, *Kaireekee*, accompanied by twelve priests,

* Since these papers were prepared for the press, I have been informed by Mr. Vancouver, who was one of my Midshipmen in the *Discovery*, and was afterward appointed Lieutenant of the *Martin* sloop of war, that he tried the method here recommended, both with English and Spanish pork, during a cruise on the Spanish Main, in the year 1782, and succeeded to the utmost of his expectations. He also made the experiment at Jamaica with the beef served by the victualling office to the ships, but not with the same success, which he attributes to the want of the necessary precautions in killing and handling the beasts; to their being hung up and opened before they had sufficient time to bleed, by which means the blood-vessels were exposed to the air, and the blood condensed before it had time to empty itself; and to their being hard driven and bruised. He adds, that having himself attended to the killing of an ox, which was carefully taken on board the *Martin*, he salted a part of it, which at the end of the week was found to have taken the salt completely, and he has no doubt would have kept for any length of time; but the experiment was not tried.

† See Plate, Number LXI.

I,

made.

1779.
January.

made an offering of a pig with the usual solemnities. The pig was then strangled, and a fire being kindled, it was thrown into the embers, and after the hair was singed off, it was again presented, with a repetition of the chanting, in the manner before described. The dead pig was then held for a short time under the Captain's nose; after which it was laid, with a cocoa-nut, at his feet, and the performers sat down. The *ava* was then brewed, and handed round; a fat hog, ready dressed, was brought in; and we were fed as before.

During the rest of the time we remained in the bay, whenever Captain Cook came on shore, he was attended by one of these priests, who went before him, giving notice that the *Orono* had landed, and ordering the people to prostrate themselves. The same person also constantly accompanied him on the water, standing in the bow of the boat, with a wand in his hand, and giving notice of his approach to the natives, who were in canoes, on which they immediately left off paddling, and lay down on their face still he had passed. Whenever he stopped at the observatory, Kaireekkea and his brethren immediately made their appearance with hogs, cocoa-nuts, bread-fruit, &c. and presented them with the usual solemnities. It was on these occasions that some of the inferior chiefs frequently requested to be permitted to make an offering to the *Orono*. When this was granted, they presented the hog themselves, generally with evident marks of fear in their countenances; whilst Kaireekkea and the priests chanted their accustomed hymns.

The civilities of this society were not, however, confined to mere ceremony and parade. Our party on shore received

1779.
January.

from them, every day, a constant supply of hogs and vegetables, more than sufficient for our subsistence; and several canoes loaded with provisions were sent to the ships with the same punctuality. No return was ever demanded, or even hinted at in the most distant manner. Their presents were made with a regularity, more like the discharge of a religious duty, than the effect of mere liberality; and when we enquired at whose charge all this munificence was displayed, we were told, it was at the expence of a great man called Kaoo, the chief of the priests, and grandfather to Kaireekee, who was at that time absent attending the king of the island.

As every thing relating to the character and behaviour of this people must be interesting to the reader, on account of the tragedy that was afterward acted here, it will be proper to acquaint him, that we had not always so much reason to be satisfied with the conduct of the warrior chiefs, or *Earees*, as with that of the priests. In all our dealings with the former, we found them sufficiently attentive to their own interests; and besides their habit of stealing, which may admit of some excuse, from the universality of the practice amongst the islanders of these seas, they made use of other artifices equally dishonourable. I shall only mention one instance, in which we discovered, with regret, our friend Koah to be a party principally concerned. As the chiefs, who brought us presents of hogs, were always sent back handsomely rewarded, we had generally a greater supply than we could make use of. On these occasions, Koah, who never failed in his attendance on us, used to beg such as we did not want, and they were always given to him. It one day happened, that a pig was presented us by a man whom Koah himself introduced as a chief, who was desirous

17-9.
January.

firous of paying his respects, and we recollected the pig to be the same that had been given to Koah just before. This leading us to suspect some trick, we found, on further inquiry, the pretended chief to be an ordinary person; and on connecting this with other circumstances, we had reason to suspect, that it was not the first time we had been the dupes of the like imposition.

Sunday 24.

Things continued in this state till the 24th, when we were a good deal surprized to find that no canoes were suffered to put off from the shore, and that the natives kept close to their houses. After several hours suspense, we learned that the bay was *tabooed*, and all intercourse with us interdicted, on account of the arrival of Terreeboo. As we had not foreseen an accident of this sort, the crews of both ships were obliged to pass the day without their usual supply of vegetables. The next morning, therefore, they endeavoured, both by threats and promises, to induce the natives to come along-side; and as some of them were at last venturing to put off, a chief was observed attempting to drive them away. A musquet was immediately fired over his head, to make him desist, which had the desired effect, and refreshments were soon after purchased as usual. In the afternoon, Terreeboo arrived, and visited the ships in a private manner, attended only by one canoe, in which were his wife and children. He staid on board till near ten o'clock, when he returned to the village of Kowrowa.

Monday 25.

Tuesday 26.

The next day, about noon, the king, in a large canoe, attended by two others, set out from the village, and paddled toward the ships in great state. Their appearance was grand and magnificent. In the first canoe was Terreeboo and his chiefs, dressed in their rich feathered clokes and helmets, and armed with long spears and daggers; in the

the second, came the venerable Kaoo, the chief of the priests, and his brethren, with their idols displayed on red cloth. These idols were busts of a gigantic size, made of wicker-work, and curiously covered with small feathers of various colours, wrought in the same manner with their cloaks. Their eyes were made of large pearl oysters, with a black nut fixed in the centre; their mouths were set with a double row of the fangs of dogs, and, together with the rest of their features, were strangely distorted. The third canoe was filled with hogs and various sorts of vegetables. As they went along, the priests in the centre canoe sung their hymns with great solemnity; and after paddling round the ships, instead of going on board, as was expected, they made toward the shore at the beach where we were stationed*.

1779.
January.

As soon as I saw them approaching, I ordered out our little guard to receive the king; and Captain Cook, perceiving that he was going on shore, followed him, and arrived nearly at the same time. We conducted them into the tent, where they had scarcely been seated, when the king rose up, and in a very graceful manner threw over the Captain's shoulders the cloak he himself wore, put a feathered helmet upon his head, and a curious fan into his hand. He also spread at his feet five or six other cloaks, all exceedingly beautiful, and of the greatest value. His attendants then brought four very large hogs, with sugar-canes, cocoa-nuts, and bread-fruit; and this part of the ceremony was concluded by the king's exchanging names with Captain Cook, which, amongst all the islanders of the Pacific Ocean, is

* This curious ceremony is represented in the annexed print. The presents were made to Captain Cook after he went on shore.

1779.
January.

esteemed the strongest pledge of friendship. A procession of priests, with a venerable old personage at their head, now appeared, followed by a long train of men leading large hogs, and others carrying plantains, sweet potatoes, &c. By the looks and gestures of Kaireekēea, I immediately knew the old man to be the chief of the priests before mentioned, on whose bounty we had so long subsisted. He had a piece of red cloth in his hands, which he wrapped round Captain Cook's shoulders, and afterward presented him with a small pig in the usual form. A seat was then made for him, next to the king, after which, Kaireekēea and his followers began their ceremonies, Kaoo and the chiefs joining in the responses.

I was surprized to see, in the person of this king the same infirm and emaciated old man, that came on board the Resolution when we were off the North East side of the island of Mowee; and we soon discovered amongst his attendants most of the persons who at that time had remained with us all night. Of this number were the two younger sons of the king, the eldest of whom was sixteen years of age, and his nephew Maiha-Maiha, whom at first we had some difficulty in recollecting, his hair being plastered over with a dirty brown paste and powder, which was no mean heightening to the most savage face I ever beheld.

As soon as the formalities of the meeting were over, Captain Cook carried Terreeoboo, and as many chiefs as the pinnacle could hold, on board the Resolution. They were received with every mark of respect that could be shewn them; and Captain Cook, in return for the feathered cloak, put a linen shirt on the king, and girt his own hanger round him. The ancient Kaoo, and about half a dozen more old chiefs,

remained on shore, and took up their abode at the priests houses. During all this time, not a canoe was seen in the bay, and the natives either kept within their huts, or lay prostrate on the ground. Before the king left the Resolution, Captain Cook obtained leave for the natives to come and trade with the ships as usual; but the women, for what reason we could not learn, still continued under the effects of the *taboo*; that is, were forbidden to stir from home, or to have any communication with us.

1779.
January.

C H A P. II.

Farther Account of Transactions with the Natives.—Their Hospitality.—Propensity to Theft.—Description of a Boxing Match.—Death of one of our Seamen.—Behaviour of the Priests at his Funeral.—The Wood Work and Images on the Morai purchased.—The Natives inquisitive about our Departure.—Their Opinion about the Design of our Voyage.—Magnificent Presents of Terreeobco to Captain Cook.—The Ships leave the Island.—The Resolution damaged in a Gale, and obliged to return.

1779.
January.
Tuesday 26.

THE quiet and inoffensive behaviour of the natives having taken away every apprehension of danger, we did not hesitate to trust ourselves amongst them at all times, and in all situations. The Officers of both ships went daily up the country, in small parties, or even singly, and frequently remained out the whole night. It would be endless to recount all the instances of kindness and civility which we received upon those occasions. Wherever we went, the people flocked about us, eager to offer every assistance in their power, and highly gratified if their services were accepted. Various little arts were practised to attract our notice, or to delay our departure. The boys and girls ran before, as we walked through their villages, and stopped us at every opening, where there was room to form a group for dancing. At one time, we were invited to accept a draught of cocoa-nut milk, or some other refreshment under

under the shade of their huts; at another, we were seated within a circle of young women, who exerted all their skill and agility to amuse us with songs and dances.

1779.
January.

The satisfaction we derived from their gentleness and hospitality, was, however, frequently interrupted by that propensity to stealing, which they have in common with all the other islanders of these seas. This circumstance was the more distressing, as it sometimes obliged us to have recourse to acts of severity, which we should willingly have avoided, if the necessity of the case had not absolutely called for them. Some of their most expert swimmers were one day discovered under the ships, drawing out the filling nails of the sheathing, which they performed very dexterously by means of a short stick, with a flint stone fixed in the end of it. To put a stop to this practice, which endangered the very existence of the vessels, we at first fired small shot at the offenders; but they easily got out of our reach by diving under the ship's bottom. It was therefore found necessary to make an example, by flogging one of them on board the *Discovery*.

About this time, a large party of gentlemen, from both ships, set out on an excursion into the interior parts of the country, with a view of examining its natural productions. An account of this journey will be given in a subsequent part of our narrative. It is, therefore, only necessary at present to observe, that it afforded Kaoo a fresh opportunity of shewing his attention and generosity. For as soon as he was informed of their departure, he sent a large supply of provisions after them, together with orders, that the inhabitants of the country through which they were to pass, should give them every assistance in their power. And, to complete

January.

1779.

the delicacy and disinterestedness of his conduct, even the people he employed could not be prevailed on to accept the smallest present. After remaining out six days, our Officers returned, without having been able to penetrate above twenty miles into the island; partly from want of proper guides, and partly from the impracticability of the country.

Wednes. 27.

The head of the Resolution's rudder being found exceedingly shaken, and most of the pintles either loose or broken, it was unhung, and sent on shore, on the 27th in the morning, to undergo a thorough repair. At the same time, the carpenters were sent into the country, under conduct of some of Kaoo's people, to cut planks for the the head rail work, which was also entirely decayed and rotten.

Thursday 28.

On the 28th, Captain Clerke, whose ill health confined him, for the most part, on board, paid Terreeboo his first visit, at his hut on shore. He was received with the same formalities as were observed with Captain Cook; and, on his coming away, though the visit was quite unexpected, he received a present of thirty large hogs, and as much fruit and roots as his crew could consume in a week.

As we had not yet seen any thing of their sports or athletic exercises, the natives, at the request of some of our Officers, entertained us this evening with a boxing-match. Though these games were much inferior, as well in point of solemnity and magnificence, as in the skill and powers of the combatants, to what we had seen exhibited at the Friendly Islands; yet, as they differed in some particulars, it may not be improper to give a short account of them. We found a vast concourse of people assembled on a level spot of ground, at a little distance from our tents. A long space

was

January.
1779.

was left vacant in the midst of them, at the upper end of which sat the judges, under three standards, from which hung slips of cloth of various colours, the skins of two wild geese, a few small birds, and bunches of feathers. When the sports were ready to begin, the signal was given by the judges, and immediately two combatants appeared. They came forward slowly, lifting up their feet very high behind, and drawing their hands along the soles. As they approached, they frequently eyed each other from head to foot, in a contemptuous manner, casting several arch looks at the spectators, straining their muscles, and using a variety of affected gestures. Being advanced within reach of each other, they stood with both arms held out straight before their faces, at which part all their blows were aimed. They struck, in what appeared to our eyes an awkward manner, with a full swing of the arm; made no attempt to parry, but eluded their adversary's attack by an inclination of the body, or by retreating. The battle was quickly decided; for if either of them was knocked down, or even fell by accident, he was considered as vanquished, and the victor expressed his triumph by a variety of gestures, which usually excited, as was intended, a loud laugh among the spectators. He then waited for a second antagonist; and if again victorious, for a third, till he was, at last, in his turn defeated. A singular rule observed in these combats is, that whilst any two are preparing to fight, a third person may step in, and choose either of them for his antagonist, when the other is obliged to withdraw. Sometimes three or four followed each other in this manner, before the match was settled. When the combat proved longer than usual, or appeared too unequal, one of the chiefs generally stepped in, and ended it by putting a stick between the combatants.

The

1779.
January.

The same good humour was preserved throughout, which we before so much admired in the Friendly Islanders. As these games were given at our desire, we found it was universally expected, that we should have borne our part in them; but our people, though much pressed by the natives, turned a deaf ear to their challenge, remembering full well the blows they got at the Friendly Islands.

This day died William Watman, a seaman of the gunner's crew; an event which I mention the more particularly, as death had hitherto been very rare amongst us. He was an old man, and much respected on account of his attachment to Captain Cook. He had formerly served as a marine twenty-one years; after which he entered as a seaman on board the *Resolution* in 1772, and served with Captain Cook in his voyage toward the South Pole. At their return, he was admitted into Greenwich hospital, through the Captain's interest, at the same time with himself; and being resolved to follow throughout the fortunes of his benefactor, he also quitted it along with him, on his being appointed to the command of the present expedition. During the voyage, he had frequently been subject to slight fevers, and was a convalescent when we came into the bay, where being sent on shore for a few days, he conceived himself perfectly recovered, and, at his own desire, returned on board; but the day following, he had a paralytic stroke, which in two days more carried him off.

At the request of the king of the island, he was buried on the *Morai*, and the ceremony was performed with as much solemnity as our situation permitted. Old Kao and his brethren were spectators, and preserved the most profound silence and attention, whilst the service was reading.

When

When we began to fill up the grave, they approached it with great reverence, threw in a dead pig, some cocoa-nuts, and plantains; and, for three nights afterward, they surrounded it, sacrificing hogs, and performing their usual ceremonies of hymns and prayers, which continued till day-break.

1779.
February.

At the head of the grave, we erected a post, and nailed upon it a square piece of board, on which was inscribed the name of the deceased, his age, and the day of his death. This they promised not to remove; and we have no doubt, but that it will be suffered to remain, as long as the frail materials, of which it is made, will permit.

The ships being in great want of fuel, the Captain desired me, on the 2d of February, to treat with the priests, for the purchase of the rail, that surrounded the top of the *Morai*. I must confess, I had, at first, some doubt about the decency of this proposal, and was apprehensive, that even the bare mention of it might be considered, by them, as a piece of shocking impiety. In this, however, I found myself mistaken. Not the smallest surprise was expressed at the application, and the wood was readily given, even without stipulating for any thing in return. Whilst the sailors were taking it away, I observed one of them carrying off a carved image; and, on further inquiry, I found, that they had conveyed to the boats the whole * semicircle. Though this was done in the presence of the natives, who had not shewn any mark of resentment at it, but had even assisted them in the removal, I thought it proper to speak to Kaoo, on the subject; who appeared very indifferent about the matter, and only desired, that we would restore the centre

Tuesday 2!

* See description of the *Morai*, in the preceding Chapter.

1779.
February.

image, I have mentioned before, which he carried into one of the priest's houses.

Terreeboo, and his Chiefs, had, for some days past, been very inquisitive about the time of our departure. This circumstance had excited in me a great curiosity to know, what opinion this people had formed of us, and what were their ideas respecting the cause and objects of our voyage. I took some pains to satisfy myself on these points; but could never learn any thing farther, than that they imagined we came from some country where provisions had failed; and that our visit to them was merely for the purpose of filling our bellies. Indeed, the meagre appearance of some of our crew, the hearty appetites with which we sat down to their fresh provisions, and our great anxiety to purchase, and carry off, as much as we were able, led them, naturally enough, to such a conclusion. To these may be added, a circumstance which puzzled them exceedingly, our having no women with us; together with our quiet conduct, and unwarlike appearance. It was ridiculous enough to see them stroking the sides, and patting the bellies, of the sailors (who were certainly much improved in the sleekness of their looks, during our short stay in the island), and telling them, partly by signs, and partly by words, that it was time for them to go; but if they would come again the next bread-fruit season, they should be better able to supply their wants. We had now been sixteen days in the bay; and if our enormous consumption of hogs and vegetables be considered, it need not be wondered, that they should wish to see us take our leave. It is very probable, however, that Terreeboo had no other view, in his inquiries, at present, than a desire of making sufficient preparation for dismissing us.

us with presents, suitable to the respect and kindness with which he had received us. For, on our telling him we should leave the island on the next day but one, we observed, that a sort of proclamation was immediately made, through the villages, to require the people to bring in their hogs, and vegetables, for the king to present to the *Orcno*, on his departure.

1779.
February.

We were this day much diverted, at the beach, by the buffooneries of one of the natives. He held in his hand an instrument, of the sort described in the last volume*; some bits of sea-weed were tied round his neck; and round each leg, a piece of strong netting, about nine inches deep, on which a great number of dogs' teeth were loosely fastened, in rows. His style of dancing was entirely burlesque, and accompanied with strange grimaces, and pantomimical distortions of the face; which though at times inexpressibly ridiculous, yet, on the whole, was without much meaning, or expression. Mr. Webber thought it worth his while to make a drawing of this person, as exhibiting a tolerable specimen of the natives; the manner in which the *maro* is tied; the figure of the instrument before mentioned, and of the ornaments round the legs, which, at other times, we also saw used by their dancers.

In the evening, we were again entertained with wrestling and boxing matches; and we displayed, in return, the few fireworks we had left. Nothing could be better calculated to excite the admiration of these islanders, and to impress them with an idea of our great superiority, than an exhibition of this kind. Captain Cook has already described the extraordinary effects of that which was made at Hapacc;

* See Vol. ii. p. 236.

1779.
February.

and though the present was, in every respect, infinitely inferior, yet the astonishment of the natives was not less.

I have before mentioned, that the carpenters, from both ships, had been sent up the country to cut planks, for the head rail-work of the Resolution. This was the third day since their departure; and having received no intelligence from them, we began to be very anxious for their safety. We were communicating our apprehensions to old Kaoo, who appeared as much concerned as ourselves, and were concerting measures with him, for sending after them, when they arrived all safe. They had been obliged to go farther into the country than was expected, before they met with trees fit for their purpose; and it was this circumstance, together with the badness of the roads, and the difficulty of bringing back the timber, which had detained them so long. They spoke in high terms of their guides, who both supplied them with provisions, and guarded their tools with the utmost fidelity.

Wednes. 3.

The next day, being fixed for our departure, Terreeoboo invited Captain Cook and myself to attend him, on the 3d, to the place, where Kaoo resided. On our arrival, we found the ground covered with parcels of cloth; a vast quantity of red and yellow feathers, tied to the fibres of cocoa-nut husks; and a great number of hatchets, and other pieces of iron-ware, that had been got in barter from us. At a little distance from these, lay an immense quantity of vegetables, of every kind, and near them was a large herd of hogs. At first, we imagined the whole to be intended as a present for us, till Kaireekkea informed me, that it was a gift, or tribute, from the people of that district to the king; and, accordingly, as soon as we were seated, they brought all the bundles,

bundles, and laid them severally at Terreeoboo's feet; spreading out the cloth, and displaying the feathers, and iron-ware, before him. The king seemed much pleased with this mark of their duty; and having selected about a third part of the iron-ware, the same proportion of feathers, and a few pieces of cloth, these were set aside, by themselves; and the remainder of the cloth, together with all the hogs and vegetables, were afterward presented to Captain Cook, and myself. We were astonished at the value and magnitude of this present, which far exceeded every thing of the kind we had seen, either at the Friendly or Society Islands. Boats were immediately sent, to carry them on board; the large hogs were picked out, to be salted for sea-store; and upward of thirty smaller pigs, and the vegetables, were divided between the two crews.

1779.
February.

The same day, we quitted the *Morai*, and got the tents and astronomical instruments on board. The charm of the *taboo* was now removed; and we had no sooner left the place, than the natives rushed in, and searched eagerly about, in expectation of finding something of value, that we might have left behind. As I happened to remain the last on shore, and waited for the return of the boat, several came crowding about me, and having made me sit down by them, began to lament our separation. It was, indeed, not without difficulty, I was able to quit them. And here, I hope I may be permitted to relate a trifling occurrence, in which I was principally concerned. Having had the command of the party on shore, during the whole time we were in the bay, I had an opportunity of becoming better acquainted with the natives, and of being better known to them, than those whose duty required them to be generally on board. As I had every reason to be satisfied with their kindness, in general,

1779.
February.

neral, so I cannot too often, nor too particularly, mention the unbounded and constant friendship of their priests.

On my part, I spared no endeavours to conciliate their affections, and gain their esteem; and I had the good fortune to succeed so far, that, when the time of our departure was made known, I was strongly solicited to remain behind, not without offers of the most flattering kind. When I excused myself, by saying, that Captain Cook would not give his consent, they proposed, that I should retire into the mountains; where, they said, they would conceal me, till after the departure of the ships; and on my farther assuring them, that the Captain would not leave the bay without me, Terrecoboo and Kaoo waited upon Captain Cook, whose son they supposed I was, with a formal request, that I might be left behind. The Captain, to avoid giving a positive refusal, to an offer so kindly intended, told them, that he could not part with me, at that time, but that he should return to the island next year, and would then endeavour to settle the matter to their satisfaction.

Thursday 4.

Early in the morning of the 4th, we unmoored, and sailed out of the bay, with the Discovery in company, and were followed by a great number of canoes. Captain Cook's design was to finish the survey of Owhyhee, before he visited the other islands, in hopes of meeting with a road better sheltered, than the bay we had just left; and in case of not succeeding here, he purposed to take a view of the South East part of Mowee, where the natives informed us we should find an excellent harbour.

Friday 5.

We had calm weather all this and the following day, which made our progress to the Northward very slow. We were accompanied by a great number of the natives in
their

their canoes; and Terreeoboo gave a fresh proof of his friendship to Captain Cook, by a large present of hogs, and vegetables, that was sent after him.

1779.
February.

In the night of the 5th, having a light breeze off the land, we made some way to the Northward; and in the morning of the 6th, having passed the Westernmost point of the island, we found ourselves abreast of a deep bay, called by the natives Toe-yah-yah. We had great hopes, that this bay would furnish us with a safe and commodious harbour, as we saw, to the North East, several fine streams of water; and the whole had the appearance of being well sheltered. These observations agreeing with the accounts given us by Koah, who accompanied Captain Cook, and had changed his name, out of compliment to us, into Britannee, the pinnace was hoisted out, and the Master, with Britannee for his guide, was sent to examine the bay, whilst the ships worked up after them. Saturday 6.

In the afternoon, the weather became gloomy, and the gusts of wind, that blew off the land, were so violent, as to make it necessary to take in all the sails, and bring to, under the mizen stay-sail. All the canoes left us, at the beginning of the gale; and Mr. Bligh, on his return, had the satisfaction of saving an old woman, and two men, whose canoe had been overfet by the violence of the wind, as they were endeavouring to gain the shore. Besides these distressed people, we had a great many women on board, whom the natives had left behind, in their hurry to shift for themselves.

The Master reported to Captain Cook, that he had landed at the only village he saw, on the North side of the bay, where he was directed to some wells of water; but found, they

1779.
February.

they would by no means answer our purpose ; that he after-
ward proceeded farther into the bay, which runs inland to
a great depth, and stretches toward the foot of a very con-
spicuous high mountain, situated on the North West end of
the island ; but that instead of meeting with safe anchorage,
as Britannee had taught him to expect, he found the shores
low and rocky, and a flat bed of coral rocks running along
the coast, and extending upward of a mile from the land ;
on the outside of which, the depth of water was twenty
fathoms, over a sandy bottom ; and that, in the mean time,
Britannee had contrived to slip away, being afraid of return-
ing, as we imagined, because his information had not
proved true and successful.

Sunday 7.

In the evening, the weather being more moderate, we
again made sail ; but about midnight it blew so violently, as
to split both the fore and main topails. On the morning of
the 7th, we bent fresh sails, and had fair weather, and a
light breeze. At noon, the latitude, by observation, was
20° 1' North, the West point of the island bearing South,
7° East, and the North West point North, 38° East. As we
were, at this time, four or five leagues from the shore, and
the weather very unsettled, none of the canoes would ven-
ture out, so that our guests were obliged to remain with us,
much indeed to their dissatisfaction ; for they were all sea-
sick, and many of them had left young children behind
them.

In the afternoon, though the weather was still squally,
we stood in for the land, and being about three leagues
from it, we saw a canoe, with two men paddling toward us,
which we immediately conjectured had been driven off the
shore, by the late boisterous weather ; and therefore stopped
the

the ship's way, in order to take them in. These poor wretches were so entirely exhausted with fatigue, that had not one of the natives on board, observing their weakness, jumped into the canoe to their assistance, they would scarcely have been able to fasten it to the rope we had thrown out for that purpose. It was with difficulty we got them up the ship's side, together with a child, about four years old, which they had lashed under the thwarts of the canoe, where it had lain with only its head above water. They told us, they had left the shore the morning before, and had been, from that time, without food or water. The usual precautions were taken in giving them victuals, and the child being committed to the care of one of the women, we found them all next morning perfectly recovered.

1779.
February.

At midnight, a gale of wind came on, which obliged us to double reef the topails, and get down the top-gallant yards. On the 8th, at day-break, we found, that the fore-mast had again given way, the fishes, which were put on the head, in King George's or Nootka Sound, on the coast of America, being sprung, and the parts so very defective, as to make it absolutely necessary to replace them, and, of course, to unstep the mast. In this difficulty, Captain Cook was for some time in doubt, whether he should run the chance of meeting with a harbour in the islands to leeward, or return to Karakakooa. That bay was not so remarkably commodious, in any respect, but that a better might probably be expected, both for the purpose of repairing the masts, and for procuring refreshments, of which, it was imagined, that the neighbourhood of Karakakooa had been already pretty well drained. On the other hand, it was considered as too great a risk to leave a place, that was tolerably sheltered, and which, once left, could not be re-

Monday 8.

1779.
February.

gained, for the mere hopes of meeting with a better; the failure of which might perhaps have left us without resource.

We therefore continued standing on toward the land, in order to give the natives an opportunity of releasing their friends on board from their confinement; and, at noon, being within a mile of the shore, a few canoes came off to us, but so crowded with people, that there was not room in them for any of our guests; we therefore hoisted out the pinnace to carry them on shore; and the Master, who went with them, had directions to examine the South coasts of the bay for water; but returned without finding any.

Tuesday 9.

The winds being variable, and a current setting strong to the Northward, we made but little progress in our return; and at eight o'clock in the evening of the 9th, it began to blow very hard from the South East, which obliged us to close reef the topails; and at two in the morning of the

Wednesday 10.

10th, in a heavy squall, we found ourselves close in with the breakers, that lie to the Northward of the West point of Owhyhee. We had just room to haul off, and avoid them, and fired several guns to apprise the Discovery of the danger.

Thursday 11.

In the forenoon, the weather was more moderate, and a few canoes came off to us, from which we learnt, that the late storms had done much mischief; and that several large canoes had been lost. During the remainder of the day, we kept beating to windward; and, before night, we were within a mile of the bay; but not choosing to run on, while it was dark, we stood off and on till day-light next morning, when we dropt anchor nearly in the same place as before.

C H A P. III.

Suspicious Behaviour of the Natives, on our Return to Karakakooa Bay.—Theft on board the Discovery, and its Consequences.—The Pinnace attacked, and the Crew obliged to quit her.—Captain Cook's Observations on the Occasion.—Attempt at the Observatory.—The Cutter of the Discovery stolen.—Measures taken by Captain Cook for its Recovery.—Goes on Shore, to invite the King on board.—The King being stopped by his Wife, and the Chiefs, a Contest arises.—News arrives of one of the Chiefs being killed, by one of our People.—Ferment on this Occasion.—One of the Chiefs threatens Captain Cook, and is shot by him.—General Attack by the Natives.—Death of Captain Cook.—Account of the Captain's Services, and a Sketch of his Character.

WE were employed the whole of the 11th, and part of the 12th, in getting out the foremast, and sending it, with the carpenters, on shore. Besides the damage which the head of the mast had sustained, we found the heel exceedingly rotten, having a large hole up the middle of it, capable of holding four or five cocoa-nuts. It was not, however, thought necessary to shorten it; and fortunately, the logs of red toa-wood, which had been cut at Eimeo, for anchor-stocks, were found fit to replace the sprung parts of the fishes. As these repairs were likely to

1779.
February.
Thursday 11.
Friday 12.

1779.
February.

take up several days, Mr. Bayly and myself, got the astronomical apparatus on shore, and pitched our tents on the *Morai*; having with us a guard of a corporal and six marines. We renewed our friendly correspondence with the priests, who, for the greater security of the workmen, and their tools, *tabooed* the place where the mast lay, sticking their wands round it, as before. The sailmakers were also sent on shore, to repair the damages which had taken place in their department, during the late gales. They were lodged in a house adjoining to the *Morai*, that was lent us by the priests. Such were our arrangements on shore. I shall now proceed to the account of those other transactions with the natives, which led, by degrees, to the fatal catastrophe of the 14th.

Upon coming to anchor, we were surprized to find our reception very different from what it had been on our first arrival; no shouts, no bustle, no confusion; but a solitary bay, with only here and there a canoe stealing close along the shore. The impulse of curiosity, which had before operated to so great a degree, might now indeed be supposed to have ceased; but the hospitable treatment we had invariably met with, and the friendly footing on which we parted, gave us some reason to expect, that they would again have flocked about us with great joy, on our return.

We were forming various conjectures, upon the occasion of this extraordinary appearance, when our anxiety was at length relieved by the return of a boat, which had been sent on shore, and brought us word, that Terreeboo was absent, and had left the bay under the *taboo*. Though this account appeared very satisfactory to most of us; yet others were of opinion, or rather, perhaps, have been led, by subsequent

sequent events, to imagine, that there was something, at this time, very suspicious in the behaviour of the natives; and that the interdiction of all intercourse with us, on pretence of the king's absence, was only to give him time to consult with his Chiefs, in what manner it might be proper to treat us. Whether these suspicions were well founded, or the account given by the natives was the truth, we were never able to ascertain. For though it is not improbable, that our sudden return, for which they could see no apparent cause, and the necessity of which we afterward found it very difficult to make them comprehend, might occasion some alarm; yet the unsuspicious conduct of Terreeboo; who, on his supposed arrival, the next morning, came immediately to visit Captain Cook, and the consequent return of the natives to their former friendly intercourse with us, are strong proofs, that they neither meant, nor apprehended, any change of conduct.

In support of this opinion, I may add the account of another accident, precisely of the same kind, which happened to us, on our first visit, the day before the arrival of the king. A native had sold a hog on board the Resolution, and taken the price agreed on, when Pareea, passing by, advised the man not to part with the hog, without an advanced price. For this, he was sharply spoken to, and pushed away; and the *taboo* being soon after laid on the bay, we had at first no doubt, but that it was in consequence of the offence given to the Chief. Both these accidents serve to shew, how very difficult it is to draw any certain conclusion from the actions of people, with whose customs, as well as language, we are so imperfectly acquainted; at the same time, some idea may be formed from them, of the difficulties, at the first view, perhaps, not very apparent, which

1779.
February.

1779.
February.

Saturday 13.

which those have to encounter, who, in all their transactions with these strangers, have to steer their course amidst so much uncertainty, where a trifling error may be attended with even the most fatal consequences. However true or false our conjectures may be, things went on in their usual quiet course, till the afternoon of the 13th.

Toward the evening of that day, the officer who commanded the watering-party of the *Discovery*, came to inform me, that several Chiefs had assembled at the well near the beach, driving away the natives, whom he had hired to assist the sailors in rolling down the casks to the shore. He told me, at the same time, that he thought their behaviour extremely suspicious, and that they meant to give him some farther disturbance. At his request, therefore, I sent a marine along with him, but suffered him to take only his side-arms. In a short time, the officer returned, and on his acquainting me, that the islanders had armed themselves with stones, and were grown very tumultuous, I went myself to the spot, attended by a marine, with his musquet. Seeing us approach, they threw away their stones, and, on my speaking to some of the Chiefs, the mob were driven away, and those who chose it, were suffered to assist in filling the casks. Having left things quiet here, I went to meet Captain Cook, whom I saw coming on shore, in the pinnace. I related to him what had just passed; and he ordered me, in case of their beginning to throw stones, or behave insolently, immediately to fire a ball at the offenders. I accordingly gave orders to the corporal, to have the pieces of the sentinels loaded with ball, instead of small shot.

Soon after our return to the tents, we were alarmed by a continued fire of musquets, from the *Discovery*, which we observed

observed to be directed at a canoe, that we saw paddling toward the shore, in great haste, pursued by one of our small boats. We immediately concluded, that the firing was in consequence of some theft, and Captain Cook ordered me to follow him with a marine armed, and to endeavour to seize the people, as they came on shore. Accordingly we ran toward the place where we supposed the canoe would land, but were too late; the people having quitted it, and made their escape into the country before our arrival.

1779.
February.

We were at this time ignorant, that the goods had been already restored; and as we thought it probable, from the circumstances we had at first observed, that they might be of importance, were unwilling to relinquish our hopes of recovering them. Having therefore inquired of the natives, which way the people had fled, we followed them, till it was near dark, when judging ourselves to be about three miles from the tents, and suspecting, that the natives, who frequently encouraged us in the pursuit, were amusing us with false information, we thought it in vain to continue our search any longer, and returned to the beach.

During our absence, a difference, of a more serious and unpleasant nature, had happened. The officer, who had been sent in the small boat, and was returning on board, with the goods which had been restored, observing Captain Cook and me engaged in the pursuit of the offenders, thought it his duty to seize the canoe, which was left drawn up on the shore. Unfortunately, this canoe belonged to Pareea, who arriving, at the same moment, from on board the Discovery, claimed his property, with many protestations of his innocence. The officer refusing to give it up, and
being

1779.
February.

being joined by the crew of the pinnace, which was waiting for Captain Cook, a scuffle ensued, in which Pareea was knocked down, by a violent blow on the head, with an oar. The natives, who were collected about the spot, and had hitherto been peaceable spectators, immediately attacked our people with such a shower of stones, as forced them to retreat, with great precipitation, and swim off to a rock, at some distance from the shore. The pinnace was immediately ransacked by the islanders; and, but for the timely interposition of Pareea, who seemed to have recovered from the blow, and forgot it at the same instant, would soon have been entirely demolished. Having driven away the crowd, he made signs to our people, that they might come and take possession of the pinnace, and that he would endeavour to get back the things which had been taken out of it. After their departure, he followed them in his canoe, with a midshipman's cap, and some other trifling articles of the plunder, and, with much apparent concern at what had happened, asked, if the *Orono* would kill him, and whether he would permit him to come on board the next day? On being assured, that he should be well received, he joined noses (as their custom is) with the officers, in token of friendship, and paddled over to the village of Kowrowa.

When Captain Cook was informed of what had passed, he expressed much uneasiness at it, and as we were returning on board, "I am afraid," said he, "that these people will oblige me to use some violent measures; for," he added, "they must not be left to imagine, that they have gained an advantage over us." However, as it was too late to take any steps this evening, he contented himself with giving orders, that every man and woman on board should be immediately turned out of the ship. As soon as this order

was

was executed, I returned on shore; and our former confidence in the natives being now much abated, by the events of the day, I posted a double guard on the *Morai*, with orders to call me, if they saw any men lurking about the beach. At about eleven o'clock, five islanders were observed creeping round the bottom of the *Morai*; they seemed very cautious in approaching us, and, at last, finding themselves discovered, retired out of sight. About midnight, one of them venturing up close to the observatory, the sentinel fired over him; on which the men fled, and we passed the remainder of the night without farther disturbance.

1779.
February.

Next morning, at day-light, I went on board the *Resolution* for the time-keeper, and, in my way, was hailed by the *Discovery*, and informed, that their cutter had been stolen, during the night, from the buoy where it was moored. Sunday 14.

When I arrived on board, I found the marines arming, and Captain Cook loading his double-barrelled gun. Whilst I was relating to him what had happened to us in the night, he interrupted me, with some eagerness, and acquainted me with the loss of the *Discovery's* cutter, and with the preparations he was making for its recovery. It had been his usual practice, whenever any thing of consequence was lost, at any of the islands in this ocean, to get the king, or some of the principal *Erees*, on board, and to keep them as hostages, till it was restored. This method, which had been always attended with success, he meant to pursue on the present occasion; and, at the same time, had given orders to stop all the canoes that should attempt to leave the bay, with an intention of seizing and destroying them, if he could not recover the cutter by peaceable means. Accordingly,

1779.
February.

ingly, the boats of both ships, well manned and armed, were stationed across the bay; and, before I left the ship, some great guns had been fired at two large canoes, that were attempting to make their escape.

It was between seven and eight o'clock when we quitted the ship together; Captain Cook in the pinnace, having Mr. Phillips, and nine marines with him; and myself in the small boat. The last orders I received from him were, to quiet the minds of the natives, on our side of the bay, by assuring them, they should not be hurt; to keep my people together; and to be on my guard. We then parted; the Captain went toward Kowrowa, where the king resided; and I proceeded to the beach. My first care, on going ashore, was to give strict orders to the marines to remain within the tent, to load their pieces with ball, and not to quit their arms. Afterward I took a walk to the huts of old Kaoo, and the priests, and explained to them, as well as I could, the object of the hostile preparations, which had exceedingly alarmed them. I found, that they had already heard of the cutter's being stolen, and I assured them, that though Captain Cook was resolved to recover it, and to punish the authors of the theft, yet that they, and the people of the village on our side, need not be under the smallest apprehension of suffering any evil from us. I desired the priests to explain this to the people, and to tell them not to be alarmed, but to continue peaceable and quiet. Kaoo asked me, with great earnestness, if Terreeoboo was to be hurt? I assured him, he was not; and both he and the rest of his brethren seemed much satisfied with this assurance.

In the mean time, Captain Cook, having called off the launch, which was stationed at the North point of the bay, and

taken it along with him, proceeded to Kowrowa, and landed with the Lieutenant and nine marines. He immediately marched into the village, where he was received with the usual marks of respect; the people prostrating themselves before him, and bringing their accustomed offerings of small hogs. Finding that there was no suspicion of his design, his next step was, to inquire for Terreeboo, and the two boys, his sons, who had been his constant guests on board the Resolution. In a short time, the boys returned along with the natives, who had been sent in search of them, and immediately led Captain Cook to the house where the king had slept. They found the old man just awoke from sleep; and, after a short conversation about the loss of the cutter, from which Captain Cook was convinced that he was in no wise privy to it, he invited him to return in the boat, and spend the day on board the Resolution. To this proposal the king readily consented, and immediately got up to accompany him.

1779.
February.

Things were in this prosperous train, the two boys being already in the pinnace, and the rest of the party having advanced near the water-side, when an elderly woman called Kancee-kabareea, the mother of the boys, and one of the king's favourite wives, came after him, and with many tears, and entreaties, besought him not to go on board. At the same time, two Chiefs, who came along with her, laid hold of him, and insisting, that he should go no farther, forced him to sit down. The natives, who were collecting in prodigious numbers along the shore, and had probably been alarmed by the firing of the great guns, and the appearances of hostility in the bay, began to throng round Captain Cook and their king. In this situation, the Lieutenant of marines, observing that his men were huddled close

1779.
February.

together in the crowd, and thus incapable of using their arms, if any occasion should require it, proposed to the Captain, to draw them up along the rocks, close to the water's edge; and the crowd readily making way for them to pass, they were drawn up in a line, at the distance of about thirty yards from the place where the king was sitting.

All this time, the old king remained on the ground, with the strongest marks of terror and dejection in his countenance; Captain Cook, not willing to abandon the object for which he had come on shore, continuing to urge him, in the most pressing manner, to proceed; whilst, on the other hand, whenever the king appeared inclined to follow him, the Chiefs, who stood round him, interposed, at first with prayers and entreaties, but afterward, having recourse to force and violence, and insisted on his staying where he was. Captain Cook therefore finding, that the alarm had spread too generally, and that it was in vain to think any longer of getting him off, without bloodshed, at last gave up the point; observing to Mr. Phillips, that it would be impossible to compel him to go on board, without the risk of killing a great number of the inhabitants.

Though the enterprize, which had carried Captain Cook on shore had now failed, and was abandoned, yet his person did not appear to have been in the least danger, till an accident happened, which gave a fatal turn to the affair. The boats, which had been stationed across the bay, having fired at some canoes, that were attempting to get out, unfortunately had killed a Chief of the first rank. The news of his death arrived at the village where Captain Cook was, just as he had left the king, and was walking slowly toward the shore. The ferment it occasioned was very conspicuous;
the

1779.
February.

the women and children were immediately sent off; and the men put on their war-mats, and armed themselves with spears and stones. One of the natives, having in his hands a stone, and a long iron spike (which they call a *pahooa*) came up to the Captain, flourishing his weapon, by way of defiance, and threatening to throw the stone. The Captain desired him to desist; but the man persisting in his insolence, he was at length provoked to fire a load of small-shot. The man having his mat on, which the shot were not able to penetrate, this had no other effect than to irritate and encourage them. Several stones were thrown at the marines; and one of the *Erees* attempted to stab Mr. Phillips with his *pahooa*; but failed in the attempt, and received from him a blow with the but end of his musquet. Captain Cook now fired his second barrel, loaded with ball, and killed one of the foremost of the natives. A general attack with stones immediately followed, which was answered by a discharge of musquetry from the marines, and the people in the boats. The islanders, contrary to the expectations of every one, stood the fire with great firmness; and before the marines had time to reload, they broke in upon them with dreadful shouts and yells. What followed was a scene of the utmost horror and confusion.

Four of the marines were cut off amongst the rocks in their retreat, and fell a sacrifice to the fury of the enemy; three more were dangerously wounded; and the Lieutenant, who had received a stab between the shoulders with a *pahooa*, having fortunately reserved his fire, shot the man who had wounded him just as he was going to repeat his blow. Our unfortunate Commander, the last time he was seen distinctly, was standing at the water's edge, and calling out to the boats to cease firing, and to pull in. If it be true, as some
of

1779.
February.

of those who were present have imagined, that the marines and boat-men had fired without his orders, and that he was desirous of preventing any further bloodshed, it is not improbable, that his humanity, on this occasion, proved fatal to him. For it was remarked, that whilst he faced the natives, none of them had offered him any violence, but that having turned about, to give his orders to the boats, he was stabbed in the back, and fell with his face into the water. On seeing him fall, the islanders set up a great shout, and his body was immediately dragged on shore, and surrounded by the enemy, who snatching the dagger out of each other's hands, shewed a savage eagerness to have a share in his destruction.

Thus fell our great and excellent Commander! After a life of so much distinguished and successful enterprize, his death, as far as regards himself, cannot be reckoned premature; since he lived to finish the great work for which he seems to have been designed; and was rather removed from the enjoyment, than cut off from the acquisition, of glory. How sincerely his loss was felt and lamented, by those who had so long found their general security in his skill and conduct, and every consolation, under their hardships, in his tenderness and humanity, it is neither necessary nor possible for me to describe; much less shall I attempt to paint the horror with which we were struck, and the universal dejection and dismay, which followed so dreadful and unexpected a calamity. The reader will not be displeased to turn from so sad a scene, to the contemplation of his character and virtues, whilst I am paying my last tribute to the memory of a dear and honoured friend, in a short history of his life, and public services.

Captain

Captain James Cook was born near Whitby, in Yorkshire, in the year 1727; and, at an early age, was put apprentice to a shopkeeper in a neighbouring village. His natural inclination not having been consulted on this occasion, he soon quitted the counter from disgust, and bound himself, for nine years, to the master of a vessel in the coal trade. At the breaking out of the war in 1755, he entered into the king's service, on board the *Eagle*, at that time commanded by Captain Hamer, and afterward by Sir Hugh Palliser, who soon discovered his merit, and introduced him on the quarter-deck.

1779.
February.

In the year 1758, we find him master of the *Northumberland*, the flag ship of Lord Colville, who had then the command of the squadron stationed on the coast of America. It was here, as I have often heard him say, that, during a hard winter, he first read Euclid, and applied himself to the study of mathematics and astronomy, without any other assistance, than what a few books, and his own industry, afforded him. At the same time, that he thus found means to cultivate and improve his mind, and to supply the deficiencies of an early education, he was engaged in most of the busy and active scenes of the war in America. At the siege of Quebec, Sir Charles Saunders committed to his charge the execution of services, of the first importance in the naval department. He piloted the boats to the attack of Montmorency; conducted the embarkation to the Heights of Abraham; examined the passage, and laid buoys for the security of the large ships in proceeding up the river. The courage and address with which he acquitted himself in these services, gained him the warm friendship of Sir Charles Saunders and Lord Colville, who continued to patronize him, during the rest of their lives, with the greatest zeal and affection.

1779.
February.

fection. At the conclusion of the war, he was appointed, through the recommendation of Lord Colville and Sir Hugh Palliser, to survey the Gulf of St. Lawrence, and the coasts of Newfoundland. In this employment he continued till the year 1767, when he was fixed on by Sir Edward Hawke, to command an expedition to the South Seas; for the purpose of observing the transit of *Venus*, and prosecuting discoveries in that part of the globe.

From this period, as his services are too well known to require a recital here, so his reputation has proportionably advanced to a height too great to be affected by my panegyrick. Indeed, he appears to have been most eminently and peculiarly qualified for this species of enterprize. The earliest habits of his life, the course of his services, and the constant application of his mind, all conspired to fit him for it, and gave him a degree of professional knowledge, which can fall to the lot of very few.

The constitution of his body was robust, inured to labour, and capable of undergoing the severest hardships. His stomach bore, without difficulty, the coarsest and most ungrateful food. Indeed, temperance in him was scarcely a virtue; so great was the indifference with which he submitted to every kind of self-denial. The qualities of his mind were of the same hardy, vigorous kind with those of his body. His understanding was strong and perspicacious. His judgment, in whatever related to the services he was engaged in, quick and sure. His designs were bold and manly; and both in the conception, and in the mode of execution, bore evident marks of a great original genius. His courage was cool and determined, and accompanied with an admirable presence of mind in the moment of danger.

danger. His manners were plain and unaffected. His temper might perhaps have been justly blamed, as subject to hastiness and passion, had not these been disarmed by a disposition the most benevolent and humane.

1779.
February.

Such were the outlines of Captain Cook's character; but its most distinguishing feature was, that unremitting perseverance in the pursuit of his object, which was not only superior to the opposition of dangers, and the pressure of hardships, but even exempt from the want of ordinary relaxation. During the long and tedious voyages in which he was engaged, his eagerness and activity were never in the least abated. No incidental temptation could detain him for a moment; even those intervals of recreation, which sometimes unavoidably occurred, and were looked for by us with a longing, that persons, who have experienced the fatigues of service, will readily excuse, were submitted to by him with a certain impatience, whenever they could not be employed in making further provision for the more effectual prosecution of his designs.

It is not necessary, here, to enumerate the instances in which these qualities were displayed, during the great and important enterprizes in which he was engaged. I shall content myself with stating the result of those services, under the two principal heads to which they may be referred, those of geography and navigation, placing each in a separate and distinct point of view.

Perhaps no science ever received greater additions from the labours of a single man, than geography has done from those of Captain Cook. In his first voyage to the South Seas, he discovered the Society Islands; determined the insularity of New Zealand; discovered the straits which sepa-

1779.
February.

rate the two islands, and are called after his name; and made a complete survey of both. He afterward explored the Eastern coast of New Holland, hitherto unknown; an extent of twenty-seven degrees of latitude, or upward of two thousand miles.

In his second expedition, he resolved the great problem of a Southern continent; having traversed that hemisphere between the latitudes of 40° and 70° , in such a manner, as not to leave a possibility of its existence, unless near the pole, and out of the reach of navigation. During this voyage, he discovered New Caledonia, the largest island in the Southern Pacific, except New Zealand; the island of Georgia; and an unknown coast, which he named Sandwich Land, the *thule* of the Southern hemisphere; and having twice visited the tropical seas, he settled the situations of the old, and made several new discoveries.

But the voyage we are now relating, is distinguished, above all the rest, by the extent and importance of its discoveries. Besides several smaller islands in the Southern Pacific, he discovered, to the North of the equinoctial line, the group called the Sandwich Islands; which, from their situation and productions, bid fairer for becoming an object of consequence, in the system of European navigation, than any other discovery in the South Sea. He afterward explored what had hitherto remained unknown of the Western coast of America, from the latitude of 43° to 70° North, containing an extent of three thousand five hundred miles; ascertained the proximity of the two great continents of Asia and America; passed the straits between them, and surveyed the coast, on each side, to such a height of Northern latitude, as to demonstrate the impracticability of a passage,

In that hemisphere, from the Atlantic into the Pacific Ocean, either by an Eastern or a Western course. In short, if we except the sea of Amur, and the Japanese Archipelago, which still remain imperfectly known to Europeans, he has completed the hydrography of the habitable globe.

1779.
February.

As a navigator, his services were not perhaps less splendid; certainly not less important and meritorious. The method which he discovered, and so successfully pursued, of preserving the health of seamen, forms a new æra in navigation, and will transmit his name to future ages, amongst the friends and benefactors of mankind.

Those who are conversant in naval history, need not be told, at how dear a rate the advantages, which have been sought, through the medium of long voyages at sea, have always been purchased. That dreadful disorder which is peculiar to this service, and whose ravages have marked the tracks of discoverers with circumstances almost too shocking to relate, must, without exercising an unwarrantable tyranny over the lives of our seamen, have proved an insuperable obstacle to the prosecution of such enterprizes. It was reserved for Captain Cook to shew the world, by repeated trials, that voyages might be protracted to the unusual length of three or even four years, in unknown regions, and under every change and rigour of climate, not only without affecting the health, but even without diminishing the probability of life, in the smallest degree. The method he pursued has been fully explained by himself, in a paper which was read before the Royal Society, in the year 1776*; and whatever improvements the experience

* Sir Godfrey Copley's gold medal was adjudged to him, on that occasion.

1779.
February.

of the present voyage has suggested, are mentioned in their proper places.

With respect to his professional abilities, I shall leave them to the judgment of those who are best acquainted with the nature of the services in which he was engaged. They will readily acknowledge, that to have conducted three expeditions of so much danger and difficulty, of so unusual a length, and in such a variety of situation, with uniform and invariable success, must have required not only a thorough and accurate knowledge of his business, but a powerful and comprehensive genius, fruitful in resources, and equally ready in the application of whatever the higher and inferior calls of the service required.

Having given the most faithful account I have been able to collect, both from my own observation, and the relations of others, of the death of my ever honoured friend, and also of his character and services; I shall now leave his memory to the gratitude and admiration of posterity; accepting, with a melancholy satisfaction, the honour, which the loss of him hath procured me, of seeing my name joined with his; and of testifying that affection and respect for his memory, which, whilst he lived, it was no less my inclination, than my constant study, to shew him.

C H A P. IV.

Transactions at Owbyhee, subsequent to the Death of Captain Cook.—Gallant Behaviour of the Lieutenant of Marines.—Dangerous Situation of the Party at the Morai.—Bravery of one of the Natives.—Consultation respecting future Measures.—Demand of the Body of Captain Cook.—Evasive and insidious Conduct of Koah, and the Chiefs.—Insolent Behaviour of the Natives.—Promotion of Officers.—Arrival of two Priests with Part of the Body.—Extraordinary Behaviour of two Boys.—Burning of the Village of Kakooa.—Unfortunate Destruction of the Dwellings of the Priests.—Recovery of the Bones of Captain Cook.—Departure from Karakakooa Bay.

IT has been already related, that four of the marines, who attended Captain Cook, were killed by the islanders on the spot. The rest, with Mr. Phillips, their Lieutenant, threw themselves into the water, and escaped, under cover of a smart fire from the boats. On this occasion, a remarkable instance of gallant behaviour, and of affection for his men, was shewn by that officer. For he had scarcely got into the boat, when, seeing one of the marines, who was a bad swimmer, struggling in the water, and in danger of being taken by the enemy, he immediately jumped into the sea to his assistance, though much wounded himself; and

I

after

1779.
February.
Sunday 14.

1779.
February.

after receiving a blow on the head from a stone, which had nearly sent him to the bottom, he caught the man by the hair, and brought him safe off*.

Our people continued for some time to keep up a constant fire from the boats (which, during the whole transaction, were not more than twenty yards from the land), in order to afford their unfortunate companions, if any of them should still remain alive, an opportunity of escaping. These efforts, seconded by a few guns, that were fired at the same time, from the *Resolution*, having forced the natives at last to retire, a small boat, manned by five of our young midshipmen, pulled toward the shore, where they saw the bodies, without any signs of life, lying on the ground; but judging it dangerous to attempt to bring them off, with so small a force, and their ammunition being nearly expended, they returned to the ships, leaving them in possession of the islanders, together with ten stands of arms.

As soon as the general consternation, which the news of this calamity occasioned throughout both crews, had a little subsided, their attention was called to our party at the *Morai*,

* From the annexed plate, the reader will be enabled to form a very clear and distinct idea of the situation of the several places mentioned in this and the three last chapters. On the farthest point of land, beyond the ships, to the left, is situated the village of Kowrowa, where Captain Cook was killed. The pile of stones, with a building on the top, at the other extremity of the plate, represents the *Morai*, where the observatories were erected. Behind the grove of cocoa-nut trees, stood the cloisters of the priests. To the left of these, is part of the village of Kakooa, which was burnt down on the 17th of February; and, farther on, amongst the rocks, at the end of the beach, is the well where we watered. The steep high ground, above the beach, is the hill from which the natives annoyed the waterers, by rolling down stones.

In the fore ground, a native is swimming on one of the boards, as described in the seventh chapter. The canoes, and the general air of the people, are represented with the greatest truth and fidelity.

where

1779.
February.

where the mast and sails were on shore, with a guard of only six marines. It is impossible for me to describe the emotions of my own mind, during the time these transactions had been carrying on, at the other side of the bay. Being at the distance only of a short mile from the village of Kowrowa, we could see distinctly an immense crowd collected on the spot where Captain Cook had just before landed. We heard the firing of the musquetry, and could perceive some extraordinary bustle and agitation in the multitude. We afterward saw the natives flying, the boats retire from the shore, and passing and repassing, in great stillness, between the ships. I must confess, that my heart soon misgave me. Where a life so dear and valuable was concerned, it was impossible not to be alarmed, by appearances both new and threatening. But, besides this, I knew, that a long and uninterrupted course of success, in his transactions with the natives of these seas, had given the Captain a degree of confidence, that I was always fearful might, at some unlucky moment, put him too much off his guard; and I now saw all the dangers to which that confidence might lead, without receiving much consolation from considering the experience that had given rise to it.

My first care, on hearing the musquets fired, was, to assure the people, who were assembled in considerable numbers, round the wall of our consecrated field, and seemed equally at a loss with ourselves how to account for what they had seen and heard, that they should not be molested; and that, at all events, I was desirous of continuing on peaceable terms with them. We remained in this posture, till the boats had returned on board, when Captain Clerke, observing, through his telescope, that we were surrounded by the natives, and apprehending they meant to attack us, ordered

1779.
February.

two four-pounders to be fired at them. Fortunately these guns, though well aimed, did no mischief, and yet gave the natives a convincing proof of their power. One of the balls broke a cocoa-nut tree in the middle, under which a party of them were sitting; and the other shivered a rock, that stood in an exact line with them. As I had, just before, given them the strongest assurances of their safety, I was exceedingly mortified at this act of hostility; and, to prevent a repetition of it, immediately dispatched a boat to acquaint Captain Clerke, that, at present, I was on the most friendly terms with the natives; and that, if occasion should hereafter arise for altering my conduct toward them, I would hoist a jack, as a signal for him to afford us all the assistance in his power.

We expected the return of the boat with the utmost impatience; and after remaining a quarter of an hour, under the most torturing anxiety and suspense, our fears were at length confirmed, by the arrival of Mr. Bligh, with orders to strike the tents as quickly as possible, and to send the sails, that were repairing, on board. Just at the same moment, our friend Kaireekeeä having also received intelligence of the death of Captain Cook, from a native, who had arrived from the other side of the bay, came to me, with great sorrow and dejection in his countenance, to inquire, if it was true?

Our situation was, at this time, extremely critical and important. Not only our own lives, but the event of the expedition, and the return of at least one of the ships, being involved in the same common danger. We had the mast of the Resolution, and the greatest part of our sails, on shore, under the protection of only six marines: their loss would
have

1779.
February.

have been irreparable ; and though the natives had not as yet shewn the smallest disposition to molest us, yet it was impossible to answer for the alteration, which the news of the transaction at Kowrowa might produce. I therefore thought it prudent to dissemble my belief of the death of Captain Cook, and to desire Kaireekkea to discourage the report ; lest either the fear of our resentment, or the successful example of their countrymen, might lead them to seize the favourable opportunity, which at this time offered itself, of giving us a second blow. At the same time, I advised him to bring old Kaoo, and the rest of the priests, into a large house that was close to the *Morai* ; partly out of regard to their safety, in case it should have been found necessary to proceed to extremities ; and partly to have him near us, in order to make use of his authority with the people, if it could be instrumental in preserving peace.

Having placed the marines on the top of the *Morai*, which formed a strong and advantageous post, and left the command with Mr. Bligh, giving him the most positive directions to act entirely on the defensive, I went on board the *Discovery*, in order to represent to Captain Clerke the dangerous situation of our affairs. As soon as I quitted the spot, the natives began to annoy our people with stones ; and I had scarcely reached the ship, before I heard the firing of the marines. I therefore returned instantly on shore, where I found things growing every moment more alarming. The natives were arming, and putting on their mats ; and their numbers increased very fast. I could also perceive several large bodies marching toward us, along the cliff which separates the village of Kakooa from the North side of the bay, where the village of Kowrowa is situated.

1779-
February.

They began, at first, to attack us with stones, from behind the walls of their inclosures, and finding no resistance on our part, they soon grew more daring. A few resolute fellows, having crept along the beach, under cover of the rocks, suddenly made their appearance at the foot of the *Morai*, with a design, as it seemed, of storming it on the side next the sea, which was its only accessible part; and were not dislodged, till after they had stood a considerable number of shot, and seen one of their party fall.

The bravery of one of these assailants well deserves to be particularly mentioned. For having returned to carry off his companion, amidst the fire of our whole party, a wound, which he received, made him quit the body and retire; but, in a few minutes, he again appeared, and being again wounded, he was obliged a second time to retreat. At this moment I arrived at the *Morai*, and saw him return the third time, bleeding and faint; and being informed of what had happened, I forbade the soldiers to fire, and he was suffered to carry off his friend; which he was just able to perform, and then fell down himself, and expired.

About this time, a strong reinforcement from both ships having landed, the natives retreated behind their walls; which giving me access to our friendly priests, I sent one of them to endeavour to bring their countrymen to some terms, and to propose to them, that if they would desist from throwing stones, I would not permit our men to fire. This truce was agreed to, and we were suffered to launch the mast, and carry off the sails, and our astronomical *apparatus*, unmolested. As soon as we had quitted the *Morai*, they took possession of it, and some of them threw a few stones; but without doing us any mischief.

It

1779.
February.

It was half an-hour past eleven o'clock, when I got on board the *Discovery*, where I found no decisive plan had been adopted for our future proceedings. The restitution of the boat, and the recovery of the body of Captain Cook were the objects, which, on all hands, we agreed to insist on; and it was my opinion, that some vigorous steps should be taken, in case the demand of them was not immediately complied with.

Though my feelings, on the death of a beloved and honoured friend, may be suspected to have had some share in this opinion, yet there were certainly other reasons, and those of the most serious kind, that had considerable weight with me. The confidence which their success in killing our Chief, and forcing us to quit the shore, must naturally have inspired; and the advantage, however trifling, which they had obtained over us the preceding day, would, I had no doubt, encourage them to make some further dangerous attempts; and the more especially, as they had little reason, from what they had hitherto seen, to dread the effects of our fire-arms. Indeed, contrary to the expectations of every one, this sort of weapon had produced no signs of terror in them. On our side, such was the condition of the ships, and the state of discipline amongst us, that had a vigorous attack been made on us, in the night, it would have been impossible to answer for the consequences.

In these apprehensions, I was supported by the opinion of most of the officers on board; and nothing seemed to me so likely to encourage the natives to make the attempt, as the appearance of our being inclined to an accommodation, which they could only attribute to weakness, or fear.

1779.
February.

In favour of more conciliatory measures, it was justly urged, that the mischief was done, and irreparable; that the natives had a strong claim to our regard, on account of their former friendship and kindness; and the more especially, as the late melancholy accident did not appear to have arisen from any premeditated design: that, on the part of Terrecoboo, his ignorance of the theft, his readiness to accompany Captain Cook on board, and his having actually sent his two sons into the boat, must free him from the smallest degree of suspicion: that the conduct of his women, and the *Erees*, might easily be accounted for, from the apprehensions occasioned by the armed force with which Captain Cook came on shore, and the hostile preparations in the bay; appearances so different from the terms of friendship and confidence, in which both parties had hitherto lived, that the arming of the natives was evidently with a design to resist the attempt, which they had some reason to imagine would be made, to carry off their king by force, and was naturally to be expected from a people full of affection and attachment to their Chiefs.

To these motives of humanity, others of a prudential nature were added; that we were in want of water, and other refreshments: that our foremast would require six or eight days work, before it could be stepped: that the spring was advancing apace; and that the speedy prosecution of our next Northern expedition ought now to be our sole object: that therefore to engage in a vindictive contest with the inhabitants, might not only lay us under the imputation of unnecessary cruelty, but would occasion an unavoidable delay in the equipment of the ships.

In this latter opinion Captain Clerke concurred; and though I was convinced, that an early display of vigorous
resentment

resentment would more effectually have answered every object both of prudence and humanity, I was not sorry, that the measures I had recommended were rejected. For though the contemptuous behaviour of the natives, and their subsequent opposition to our necessary operations on shore, arising, I have no doubt, from a misconstruction of our lenity, compelled us at last to have recourse to violence in our own defence; yet I am not so sure, that the circumstances of the case would, in the opinion of the world, have justified the use of force, on our part, in the first instance. Cautionary rigour is at all times invidious, and has this additional objection to it, that the severity of a preventive course, when it best succeeds, leaves its expediency the least apparent.

1779.
February.

During the time we were thus engaged, in concerting some plan for our future conduct, a prodigious concourse of natives still kept possession of the shore; and some of them came off in canoes, and had the boldness to approach within pistol-shot of the ships, and to insult us by various marks of contempt and defiance. It was with great difficulty we could restrain the sailors from the use of their arms, on these occasions; but as pacific measures had been resolved on, the canoes were suffered to return unmolested.

In pursuance of this plan, it was determined, that I should proceed toward the shore, with the boats of both ships, well manned and armed, with a view to bring the natives to a parley, and, if possible, to obtain a conference with some of the Chiefs.

If this attempt succeeded, I was to demand the dead bodies, and particularly that of Captain Cook; to threaten
them

1779.
February.

them with our vengeance in case of a refusal; but, by no means, to fire unless attacked; and not to land on any account whatever. These orders were delivered to me before the whole party, and in the most positive manner.

I left the ships about four o'clock in the afternoon; and, as we approached the shore, I perceived every indication of a hostile reception. The whole crowd of natives was in motion; the women and children retiring; the men putting on their war mats, and arming themselves with long spears and daggers. We also observed, that, since the morning, they had thrown up stone breast-works along the beach, where Captain Cook had landed; probably in expectation of an attack at that place; and, as soon as we were within reach, they began to throw stones at us with slings, but without doing any mischief. Concluding, therefore, that all attempts to bring them to a parley would be in vain, unless I first gave them some ground for mutual confidence; I ordered the armed boats to stop, and went on, in the small boat, alone, with a white flag in my hand, which, by a general cry of joy from the natives, I had the satisfaction to find was instantly understood. The women immediately returned from the side of the hill, whither they had retired; the men threw off their mats; and all sat down together by the water-side, extending their arms, and inviting me to come on shore.

Though this behaviour was very expressive of a friendly disposition, yet I could not help entertaining some suspicions of its sincerity. But when I saw Koah, with a boldness and assurance altogether unaccountable, swimming off toward the boat, with a white flag in his hand, I thought it necessary to return this mark of confidence, and therefore received him into the boat, though armed; a circumstance
which

which did not tend to lessen my suspicions. I must confess, I had long harboured an unfavourable opinion of this man. The priests had always told us, that he was of a malicious disposition, and no friend of ours; and the repeated detections of his fraud and treachery, had convinced us of the truth of their representations. Add to all this, the shocking transaction of the morning, in which he was seen acting a principal part, made me feel the utmost horror at finding myself so near him; and as he came up to me with feigned tears, and embraced me, I was so distrustful of his intentions, that I could not help taking hold of the point of the *pahboah*, which he held in his hand, and turning it from me. I told him, that I had come to demand the body of Captain Cook; and to declare war against them, unless it was instantly restored. He assured me this should be done as soon as possible; and that he would go himself for that purpose; and, after begging of me a piece of iron, with much assurance, as if nothing extraordinary had happened, he leaped into the sea, and swam ashore, calling out to his countrymen, that we were all friends again.

1779.
February.

We waited near an hour, with great anxiety for his return; during which time, the rest of the boats had approached so near the shore, as to enter into conversation with a party of the natives, at some distance from us; by whom they were plainly given to understand, that the body had been cut to pieces, and carried up the country; but of this circumstance I was not informed, till our return to the ships.

I began now to express some impatience at Koah's delay; upon which the Chiefs pressed me exceedingly to come on shore; assuring me, that if I would go myself to Terreeboo, the

1779.
February.

the body would certainly be restored to me. When they found they could not prevail on me to land, they attempted, under a pretence of wishing to converse with more ease, to decoy our boat among some rocks, where they would have had it in their power to cut us off from the rest. It was no difficult matter to see through these artifices; and I was, therefore, strongly inclined to break off all further communication with them, when a Chief came to us, who was the particular friend of Captain Clerke, and of the officers of the Discovery, on board which ship he had sailed, when we last left the bay, intending to take his passage to *Mowee*. He told us, he came from Terreeoboo to acquaint us, that the body was carried up the country; but that it should be brought to us the next morning. There appeared a great deal of sincerity in his manner; and being asked, if he told a falsehood, he hooked his two fore-fingers together, which is understood amongst these islanders as the sign of truth; in the use of which they are very scrupulous.

As I was now at a loss in what manner to proceed, I sent Mr. Vancouver to acquaint Captain Clerke with all that had passed; that my opinion was, they meant not to keep their word with us, and were so far from being sorry at what had happened, that, on the contrary, they were full of spirits and confidence on account of their late success, and fought only to gain time, till they could contrive some scheme for getting us into their power. Mr. Vancouver came back with orders for me to return on board; having first given the natives to understand, that, if the body was not brought the next morning, the town should be destroyed.

When they saw that we were going off, they endeavoured to provoke us by the most insulting and contemptuous gestures. Some of our people said, they could distinguish several

1779.
February.

ral of the natives parading about in the clothes of our unfortunate comrades; and, among them, a Chief brandishing Captain Cook's hanger, and a woman holding the scabbard. Indeed, there can be no doubt, but that our behaviour had given them a mean opinion of our courage; for they could have but little notion of the motives of humanity that directed it.

In consequence of the report I made to Captain Clerke, of what I conceived to be the present temper and disposition of the islanders, the most effectual measures were taken to guard against any attack they might make in the night. The boats were moored with top-chains; additional sentinels were posted on both ships; and guard-boats were stationed to row round them, in order to prevent the natives from cutting the cables. During the night we observed a prodigious number of lights on the hills, which made some of us imagine, they were removing their effects back into the country, in consequence of our threats. But I rather believe them to have been the sacrifices that were performing on account of the war, in which they imagined themselves about to be engaged; and most probably the bodies of our slain countrymen were, at that time, burning. We afterward saw fires of the same kind, as we passed the island of Morotoi; and which, we were told by some natives then on board, were made on account of the war they had declared against a neighbouring island. And this agrees with what we learned amongst the Friendly and Society Isles, that, previous to any expedition against an enemy, the Chiefs always endeavoured to animate and inflame the courage of the people by feasts and rejoicings in the night.

We remained the whole night undisturbed, except by the howlings and lamentations which were heard on shore:

1779.
February.
Monday 15.

and early the next morning, Koah came along-side the Resolution, with a present of cloth, and a small pig, which he desired leave to present to me. I have mentioned before, that I was supposed, by the natives, to be the son of Captain Cook; and as he, in his life-time, had always suffered them to believe it, I was probably considered as the Chief, after his death. As soon as I came on deck, I questioned him about the body; and, on his returning me nothing but evasive answers, I refused to accept his presents; and was going to dismiss him, with some expressions of anger and resentment, had not Captain Clerke, judging it best, at all events, to keep up the appearance of friendship, thought it more proper, that he should be treated with the usual respect.

This treacherous fellow came frequently to us, during the course of the forenoon, with some trifling present or other; and as I always observed him eyeing every part of the ship with great attention, I took care he should see we were well prepared for our defence.

He was exceedingly urgent, both with Captain Clerke and myself, to go on shore, laying all the blame of the detention of the bodies on the other Chiefs; and assuring us, that every thing might be settled to our satisfaction, by a personal interview with Terrecoboo. However, his conduct was too suspicious to make it prudent to comply with this request; and indeed a fact came afterward to our knowledge, which proved the entire falsehood of his pretensions. For we were told, that, immediately after the action in which Captain Cook was killed, the old king had retired to a cave in the steep part of the mountain, that hangs over the bay, which was accessible only by the help of ropes,
and

and where he remained for many days, having his victuals let down to him by cords.

1779.
February.

When Koah returned from the ships, we could perceive that his countrymen, who had been collected, by break of day, in vast crowds on the shore, thronged about him with great eagerness; as if to learn the intelligence he had acquired, and what was to be done in consequence of it. It is very probable, that they expected we should attempt to put our threats in execution; and they seemed fully resolved to stand their ground. During the whole morning, we heard conchs blowing in different parts of the coast; large parties were seen marching over the hills; and, in short, appearances were so alarming, that we carried out a stream anchor, to enable us to haul the ship abreast of the town, in case of an attack; and stationed boats off the North point of the bay, to prevent a surprise from that quarter.

The breach of their engagement to restore the bodies of the slain, and the warlike posture, in which they, at this time, appeared, occasioned fresh debates amongst us concerning the measures next to be pursued. It was, at last, determined, that nothing should be suffered to interfere with the repair of the mast, and the preparations for our departure; but that we should, nevertheless, continue our negotiations for the recovery of the bodies.

The greatest part of the day was taken up in getting the fore-mast into a proper situation on deck, for the carpenters to work upon it; and in making the necessary alterations in the commissions of the officers. The command of the expedition having devolved on Captain Clerke, he removed on board the Resolution, appointed Lieutenant Gore to be Captain of the Discovery, and promoted Mr. Harvey, a midshipman,

1779.
February.

shipman, who had been with Captain Cook in his two last voyages, to the vacant Lieutenancy. During the whole day, we met with no interruption from the natives; and, at night, the launch was again moored with a top-chain; and guard-boats stationed round both ships as before.

About eight o'clock, it being very dark, a canoe was heard paddling toward the ship; and as soon as it was seen, both the sentinels on deck fired into it. There were two persons in the canoe, and they immediately roared out "*Tinnee*," (which was the way in which they pronounced my name), and said they were friends, and had something for me belonging to Captain Cook. When they came on board, they threw themselves at our feet, and appeared exceedingly frightened. Luckily neither of them was hurt, notwithstanding the balls of both pieces had gone through the canoe. One of them was the person, whom I have before mentioned under the name of the *Taboo* man, who constantly attended Captain Cook with the circumstances of ceremony I have already described; and who, though a man of rank in the island, could scarcely be hindered from performing for him the lowest offices of a menial servant. After lamenting, with abundance of tears, the loss of the *Orono*, he told us, that he had brought us a part of his body. He then presented to us a small bundle wrapped up in cloth, which he brought under his arm; and it is impossible to describe the horror which seized us, on finding in it, a piece of human flesh, about nine or ten pounds weight. This, he said, was all that remained of the body; that the rest was cut to pieces, and burnt; but that the head and all the bones, except what belonged to the trunk, were in the possession of *Terreeoboo*, and the other *Erees*; that what we saw had been allotted to *Kaoo*, the chief of

the priests, to be made use of in some religious ceremony ; and that he had sent it as a proof of his innocence and attachment to us.

1779.
February.

This afforded an opportunity of informing ourselves, whether they were cannibals ; and we did not neglect it. We first tried, by many indirect questions, put to each of them apart, to learn in what manner the rest of the bodies had been disposed of ; and finding them very constant in one story, that, after the flesh had been cut off, it was all burnt ; we at last put the direct question, Whether they had not eat some of it ? They immediately shewed as much horror at the idea, as any European would have done ; and asked, very naturally, if that was the custom amongst us ? They afterward asked us, with great earnestness and apparent apprehension, “ When the *Orono* would come again ? and what he would do to them on his return ? ” The same inquiry was frequently made afterward by others ; and this idea agrees with the general tenour of their conduct toward him, which shewed, that they considered him as a being of a superior nature.

We pressed our two friendly visitors to remain on board till morning ; but in vain. They told us, that, if this transaction should come to the knowledge of the king, or Chiefs, it might be attended with the most fatal consequences to their whole society ; in order to prevent which, they had been obliged to come off to us in the dark ; and that the same precaution would be necessary in returning on shore. They informed us farther, that the Chiefs were eager to revenge the death of their countrymen ; and, particularly, cautioned us against trusting Koah, who, they said, was our mortal and implacable enemy ; and desired nothing more ardently, than
an

1779.
February.

an opportunity of fighting us; to which the blowing of the conchs, we had heard in the morning, was meant as a challenge.

We learned from these men, that seventeen of their countrymen were killed in the first action at Kowrowa, of whom five were Chiefs; and that Kaneena and his brother, our very particular friends, were unfortunately of that number. Eight, they said, were killed at the observatory; three of whom were also of the first rank.

About eleven o'clock, our two friends left us, and took the precaution to desire, that our guard-boat might attend them, till they had passed the Discovery, lest they should again be fired upon, which might alarm their countrymen on shore, and expose them to the danger of being discovered. This request was complied with; and we had the satisfaction to find, that they got safe and undiscovered to land.

During the remainder of this night, we heard the same loud howling and lamentations, as in the preceding one. Tuesday 16. Early in the morning, we received another visit from Koah. I must confess, I was a little piqued to find, that, notwithstanding the most evident marks of treachery in his conduct, and the positive testimony of our friends the priests, he should still be permitted to carry on the same farce, and to make us at least appear to be the dupes of his hypocrisy. Indeed our situation was become extremely awkward and unpromising; none of the purposes for which this pacific course of proceeding had been adopted, having hitherto been in the least forwarded by it. No satisfactory answer whatever had been given to our demands; we did not seem to be at all advanced toward a reconciliation with the islanders;

Islanders; they still kept in force on the shore, as if determined to resist any attempts we might make to land; and yet the attempt was become absolutely necessary, as the completing our supply of water would not admit of any longer delay.

1779.
February.

However it must be observed, in justice to the conduct of Captain Clerke, that it was very probable, from the great numbers of the natives, and from the resolution with which they seemed to expect us, an attack could not have been made without some danger; and that the loss of a very few men might have been severely felt by us, during the remaining course of our voyage. Whereas the delaying the execution of our threats, though, on the one hand, it lessened their opinion of our prowess, had the effect of causing them to disperse, on the other. For, this day, about noon, finding us persist in our inactivity, great bodies of them, after blowing their conchs, and using every mode of defiance, marched off, over the hills, and never appeared afterward. Those, however, who remained, were not the less daring and insolent. One man had the audacity to come within musquet-shot, a-head of the ship; and, after flinging several stones at us, he waved Captain Cook's hat over his head, whilst his countrymen on shore were exulting, and encouraging his boldness. Our people were all in a flame at this insult, and coming in a body on the quarter-deck, begged they might no longer be obliged to put up with these repeated provocations; and requested me to obtain permission for them, from Captain Clerke, to avail themselves of the first fair occasion of revenging the death of their Commander. On my acquainting him with what was passing, he gave orders for some great guns to be fired at the natives on shore; and promised the crew, that if they should

1779.
February.

should meet with any molestation at the watering-place, the next day, they should then be left at liberty to chastise them.

It is somewhat remarkable, that, before we could bring our guns to bear, the islanders had suspected our intentions, from the stir they saw in the ship, and had retired behind their houses and walls. We were therefore obliged to fire, in some measure, at random; notwithstanding which, our shot produced all the effects that could have been desired. For, soon after, we saw Koah paddling toward us, with extreme haste, and, on his arrival, we learned, that some people had been killed, and amongst the rest, Maiha-maiha, a principal Chief, and a near relation of the king*.

Soon after the arrival of Koah, two boys swam off from the *Morai* toward the ships, having each a long spear in his hand; and after they had approached pretty near, they began to chant a song, in a very solemn manner; the subject of which, from their often mentioning the word *Orono*, and pointing to the village where Captain Cook was killed, we concluded to be the late calamitous disaster. Having sung in a plaintive strain for about twelve or fifteen minutes, during the whole of which time they remained in the water, they went on board the *Discovery*, and delivered their spears; and, after making a short stay, returned on shore. Who sent them, or what was the object of this ceremony, we were never able to learn.

At night, the usual precautions were taken for the security of the ships; and as soon as it was dark, our two

* The word *matee*, is commonly used, in the language of these islands, to express either killing or wounding; and we were afterward told, that this Chief had only received a slight blow on the face from a stone, which had been struck by one of the balls.

friends,

friends, who had visited us the night before, came off again. They assured us, that though the effects of our great guns, this afternoon, had terrified the Chiefs exceedingly, they had by no means laid aside their hostile intentions, and advised us to be on our guard.

1779.
February.

The next morning, the boats of both ships were sent ashore for water; and the Discovery was warped close to the beach, in order to cover that service. We soon found, that the intelligence which the priests had sent us, was not without foundation; and that the natives were resolved to take every opportunity of annoying us, when it could be done without much risk. Wednes. 17.

Throughout all this group of islands, the villages, for the most part, are situated near the sea; and the adjacent ground is inclosed with stone walls, about three feet high. These, we at first imagined, were intended for the division of property; but we now discovered, that they served, and probably were principally designed, for a defence against invasion. They consist of loose stones, and the inhabitants are very dexterous in shifting them, with great quickness, to such situations, as the direction of the attack may require. In the sides of the mountain, which hangs over the bay, they have also little holes, or caves, of considerable depth, the entrance of which is secured by a fence of the same kind. From behind both these defences the natives kept perpetually harassing our waterers with stones; nor could the small force we had on shore, with the advantage of musquets, compel them to retreat.

In this exposed situation, our people were so taken up in attending to their own safety, that they employed the whole forenoon in filling only one ton of water. As it was there-

1779.
February.

fore impossible to perform this service, till their assailants were driven to a greater distance, the Discovery was ordered to dislodge them, with her great guns ; which being effected by a few discharges, the men landed without molestation. However, the natives soon after made their appearance again, in their usual mode of attack ; and it was now found absolutely necessary to burn down some straggling houses, near the wall, behind which they had taken shelter. In executing these orders, I am sorry to add, that our people were hurried into acts of unnecessary cruelty and devastation. Something ought certainly to be allowed to their resentment of the repeated insults, and contemptuous behaviour, of the islanders, and to the natural desire of revenging the loss of their Commander. But, at the same time, their conduct served strongly to convince me, that the utmost precaution is necessary in trusting, though but for a moment, the discretionary use of arms, in the hands of private seamen, or soldiers, on such occasions. The rigour of discipline, and the habits of obedience, by which their force is kept directed to its proper objects, lead them naturally enough to conceive, that whatever they have the power, they have also the right to do. Actual disobedience being almost the only crime for which they are accustomed to expect punishment, they learn to consider it as the only measure of right and wrong ; and hence are apt to conclude, that what they can do with impunity, they may do with justice and honour. So that the feelings of humanity, which are inseparable from us all, and that generosity toward an unresisting enemy, which, at other times, is the distinguishing mark of brave men, become but weak restraints to the exercise of violence, when opposed to the desire they naturally have of shewing their own independence and power.

I have

I have already mentioned, that orders had been given to burn only a few straggling huts, which afforded shelter to the natives. We were therefore a good deal surprized to see the whole village on fire; and before a boat, that was sent to stop the progress of the mischief, could reach the shore, the houses of our old and constant friends, the priests, were all in flames. I cannot enough lament the illness, that confined me on board this day. The priests had always been under my protection; and, unluckily, the officers who were then on duty, having been seldom on shore at the *Morai*, were not much acquainted with the circumstances of the place. Had I been present myself, I might probably have been the means of saving their little society from destruction.

1779.
February.

Several of the natives were shot, in making their escape from the flames; and our people cut off the heads of two of them, and brought them on board. The fate of one poor islander was much lamented by us all. As he was coming to the well for water, he was shot at by one of the marines. The ball struck his calibash, which he immediately threw from him and fled. He was pursued into one of the caves I have before described, and no lion could have defended his den with greater courage and fierceness; till at last, after having kept two of our people at bay for a considerable time, he expired, covered with wounds. It was this accident, that first brought us acquainted with the use of these caverns.

At this time, an elderly man was taken prisoner, bound, and sent on board in the same boat with the heads of his two countrymen. I never saw horror so strongly pictured, as in the face of this man, nor so violent a transition to

1779.
February.

extravagant joy, as when he was untied, and told he might go away in safety. He shewed us he did not want gratitude, as he frequently afterward returned with presents of provisions; and also did us other services.

Soon after the village was destroyed, we saw, coming down the hill, a man, attended by fifteen or twenty boys, holding pieces of white cloth, green boughs, plantains, &c. in their hands. I knew not how it happened, that this peaceful embassy, as soon as they were within reach, received the fire of a party of our men. This, however, did not stop them. They continued their procession, and the officer on duty came up, in time, to prevent a second discharge. As they approached nearer, it was found to be our much-esteemed friend Kaireekeea, who had fled on our first setting fire to the village, and had now returned, and desired to be sent on board the Resolution.

When he arrived, we found him exceedingly grave and thoughtful. We endeavoured to make him understand the necessity we were under of setting fire to the village, by which his house, and those of his brethren, were unintentionally consumed. He expostulated a little with us on our want of friendship, and on our ingratitude. And, indeed, it was not till now, that we learnt the whole extent of the injury we had done them. He told us, that, relying on the promises I had made them, and on the assurances they had afterward received from the men, who had brought us the remains of Captain Cook, they had not removed their effects back into the country, with the rest of the inhabitants, but had put every thing that was valuable of their own, as well as what they had collected from us, into a house close to the *Morai*, where they had the mortification to see it all set on fire by ourselves.

On coming on board, he had seen the heads of his countrymen lying on the deck, at which he was exceedingly shocked, and desired, with great earnestness, that they might be thrown over-board. This request Captain Clerke instantly ordered to be complied with.

1779.
February.

In the evening, the watering party returned on board, having met with no farther interruption. We passed a gloomy night; the cries and lamentations we heard on shore being far more dreadful than ever. Our only consolation was, the hope that we should have no occasion, in future, for a repetition of such severities.

It is very extraordinary, that, amidst all these disturbances, the women of the island, who were on board, never offered to leave us, nor discovered the smallest apprehensions either for themselves or their friends ashore. So entirely unconcerned did they appear, that some of them, who were on deck when the town was in flames, seemed to admire the sight, and frequently cried out, that it was *maitai*, or very fine.

The next morning, Koah came off as usual to the ships. Thursday 18.
As there existed no longer any necessity for keeping terms with him, I was allowed to have my own way. When he approached toward the side of the ship, singing his song, and offering me a hog, and some plantains, I ordered him to keep off, cautioning him never to appear again without Captain Cook's bones, lest his life should pay the forfeit of his frequent breach of promise. He did not appear much mortified with this reception, but went immediately on shore, and joined a party of his countrymen, who were pelting the waterers with stones. The body of the young man, who had been killed the day before, was found
this

1779.
February.

this morning, lying at the entrance of the cave; and some of our people went, and threw a mat over it. Soon after which they saw some men carrying him off on their shoulders, and could hear them singing, as they marched, a mournful song.

The natives, being at last convinced that it was not the want of ability to punish them, which had hitherto made us tolerate their provocations, desisted from giving us any farther molestation; and, in the evening, a Chief called Eappo, who had seldom visited us, but whom we knew to be a man of the very first consequence, came with presents from Terrecoboo to sue for peace. These presents were received, and he was dismissed with the same answer which had before been given, that, until the remains of Captain Cook should be restored, no peace would be granted. We learned from this person, that the flesh of all the bodies of our people, together with the bones of the trunks, had been burnt; that the limb bones of the marines had been divided amongst the inferior Chiefs; and that those of Captain Cook had been disposed of in the following manner: the head, to a great Chief, called Kahoo-opeon; the hair to Maia-maia; and the legs, thighs, and arms to Terrecoboo. After it was dark, many of the inhabitants came off with roots and other vegetables; and we also received two large presents of the same articles from Kaireekkea.

Friday 19.

The 19th was chiefly taken up in sending and receiving the messages which passed between Captain Clerke and Terrecoboo. Eappo was very pressing, that one of our officers should go on shore; and, in the mean time, offered to remain as an hostage on board. This request, however, it was not thought proper to comply with; and he left us with a promise of bringing the bones the next day. At

the beach, the waterers did not meet with the least opposition from the natives; who, notwithstanding our cautious behaviour, came amongst us again, without the smallest appearance of diffidence or apprehension.

1779.
February.

Early in the morning of the 20th, we had the satisfaction of getting the fore-mast stepped. It was an operation attended with great difficulty, and some danger; our ropes being so exceedingly rotten, that the purchase gave way several times. Saturday 20.

Between ten and eleven o'clock, we saw a great number of people descending the hill, which is over the beach, in a kind of procession, each man carrying a sugar-cane or two on his shoulders, and bread-fruit, *taro*, and plantains in his hand. They were preceded by two drummers; who, when they came to the water-side, sat down by a white flag, and began to beat their drums, while those who had followed them, advanced, one by one; and, having deposited the presents they had brought, retired in the same order. Soon after, Eappo came in sight, in his long feathered cloak, bearing something with great solemnity in his hands; and having placed himself on a rock, he made signs for a boat to be sent him.

Captain Clerke, conjecturing that he had brought the bones of Captain Cook which proved to be the fact, went himself in the pinnace to receive them; and ordered me to attend him in the cutter. When we arrived at the beach, Eappo came into the pinnace, and delivered to the Captain the bones wrapped up in a large quantity of fine new cloth, and covered with a spotted cloak of black and white feathers. He afterward attended us to the Resolution; but could not be prevailed upon to go on board;

1779.
February.

board; probably not choosing, from a sense of decency, to be present at the opening of the bundle. We found in it both the hands of Captain Cook entire, which were well known from a remarkable scar on one of them, that divided the thumb from the fore-finger, the whole length of the metacarpal bone; the skull, but with the scalp separated from it, and the bones that form the face wanting; the scalp, with the hair upon it cut short, and the ears adhering to it; the bones of both arms, with the skin of the fore-arms hanging to them; the thigh and leg-bones joined together, but without the feet. The ligaments of the joints were entire; and the whole bore evident marks of having been in the fire, except the hands, which had the flesh left upon them, and were cut in several places, and crammed with salt, apparently with an intention of preserving them. The scalp had a cut in the back part of it, but the skull was free from any fracture. The lower jaw and feet, which were wanting, Eappo told us, had been seized by different Chiefs, and that Terreeoboo was using every means to recover them.

Sunday 21.

The next morning, Eappo, and the king's son, came on board, and brought with them the remaining bones of Captain Cook; the barrels of his gun, his shoes, and some other trifles that belonged to him. Eappo took great pains to convince us, that Terreeoboo, Maiha-maiha, and himself were most heartily desirous of peace; that they had given us the most convincing proof of it in their power; and that they had been prevented from giving it sooner by the other Chiefs, many of whom were still our enemies. He lamented, with the greatest sorrow, the death of six Chiefs we had killed, some of whom, he said, were amongst our best friends. The cutter, he told us, was taken away by

Pareea's

1779.
February.

Pareea's people; very probably in revenge for the blow that had been given him; and that it had been broken up the next day. The arms of the marines, which we had also demanded, he assured us, had been carried off by the common people, and were irrecoverable; the bones of the Chief alone having been preserved, as belonging to Terreeboo and the *Erees*.

Nothing now remained, but to perform the last offices to our great and unfortunate commander. Eappo was dismissed with orders to *taboo* all the bay; and, in the afternoon, the bones having been put into a coffin, and the service read over them, they were committed to the deep with the usual military honours. What our feelings were on this occasion, I leave the world to conceive; those who were present know, that it is not in my power to express them.

During the forenoon of the 22d, not a canoe was seen paddling in the bay; the *taboo*, which Eappo had laid on it the day before, at our request, not being yet taken off. At length Eappo came off to us. We assured him, that we were now entirely satisfied; and that, as the *Orono* was buried, all remembrance of what had passed was buried with him. We afterward desired him to take off the *taboo*, and to make it known, that the people might bring their provisions as usual. The ships were soon surrounded with canoes, and many of the Chiefs came on board, expressing great sorrow at what had happened, and their satisfaction at our reconciliation. Several of our friends, who did not visit us, sent presents of large hogs, and other provisions. Amongst the rest came the old treacherous Koah, but was refused admittance.

1779.
February.

As we had now every thing ready for sea, Captain Clerke imagining, that, if the news of our proceedings should reach the Islands to leeward before us, it might have a bad effect, gave orders to unmoor. About eight in the evening we dismissed all the natives ; and Eappo, and the friendly Kaireekkea, took an affectionate leave of us. We immediately weighed, and stood out of the bay. The natives were collected on the shore in great numbers ; and, as we passed along, received our last farewels with every mark of affection and good-will.

C H A P. V.

Departure from Karakakooa in Search of an Harbour on the South East Side of Mowee.—Driven to Leeward by the Easterly Winds and Current.—Pass the Island of Tahoorowa.—Description of the South West Side of Mowee.—Run along the Coasts of Ranai and Morotoi to Woahoo.—Description of the North East Coast of Woahoo.—Unsuccessful Attempt to water.—Passage to Atooi.—Anchor in Wymoa Bay.—Dangerous Situation of the Watering Party on Shore.—Civil Dissentions in the Islands.—Visit from the contending Chiefs.—Anchor off Oneebeow.—Final Departure from the Sandwich Islands.

WE got clear of the land about ten ; and, hoisting in the boats, stood to the Northward, with an intention of searching for an harbour on the South East side of Mowee, which we had heard frequently mentioned by the natives. The next morning we found ourselves driven to leeward by a heavy swell from the North East ; and a fresh gale, springing up from the same quarter, carried us still farther to the Westward. At midnight we tacked, and stood to the South for four hours, in order to keep clear of the land ; and, at day-break, we found ourselves standing toward a small barren island, called Tahoorowa, which lies seven or eight miles to the South West of Mowee.

1779.
February.
Monday 22.

Tuesday 23.

Wednes. 24.

1779.
February.

All prospect of examining more nearly the South East parts of Mowee being now destroyed, we bore away, and ran along the South East side of Tahoorowa. As we were steering close round its Western extremity, with an intention of fetching the West side of Mowee, we suddenly shoaled our water, and observed the sea breaking on some detached rocks, almost right ahead. This obliged us to keep away a league and a half, when we again steered to the Northward; and, after passing over a bank, with nineteen fathoms water, stood for a passage between Mowee and an island called Ranai. At noon, the latitude was, by observation, $20^{\circ} 42'$ North; and the longitude $203^{\circ} 22'$ East; the Southern extremity of Mowee bearing East South East, quarter East; the Southern extremity of Ranai West North West, quarter West; Morotoi, North West and by North; and the Western extremity of Tahoorowa, South by East, seven miles distant. Our longitude was accurately deduced from observations made by the time-keeper before and after noon, compared with the longitude found by a great many distances of the moon from the sun and stars, which were also observed the same day.

In the afternoon, the weather being calm, with light airs from the West, we stood on to the North North West; but, at sun-set, observing a shoal, which appeared to stretch to a considerable distance from the West point of Mowee, toward the middle of the passage, and the weather being unsettled, we tacked, and stood toward the South.

The South West side of this island, which we now had passed without being able to get near the shore, forms the same distant view with the North East, as seen on our return from the North, in November 1778; the mountainous parts, which

1779-
February,

which are connected by a low, flat isthmus, appearing at first like two separate islands. This deception continued on the South West side, till we approached within eight or ten leagues of the coast, which, bending inward, to a great depth, formed a fine capacious bay. The Westernmost point, off which the shoal we have just mentioned runs, is made remarkable by a small hillock, to the Southward of which there is a fine sandy bay, with several huts on the shore, and a number of cocoa-nut trees growing about them.

During the course of the day, we were visited by several of the natives, who came off to sell provisions; and we soon found, that they had heard of our late unfortunate transactions at Owhyhee. They were very curious to learn the particulars, from a woman who had concealed herself on board the Resolution, in order to take her passage to Atooi; inquiring eagerly after Pareea, and some other Chiefs, and appearing much shocked at the death of Kaneena, and his brother. We had, however, the satisfaction to find, that, in whatever light the woman might have represented this business, it had no bad effect on their behaviour, which was remarkably civil and submissive.

The weather continued variable, during the night; but in the morning of the 25th, having the wind at East, we ran Thursday, 25th, along the South side of Ranai, till near noon; after which, we had calms and baffling winds till evening, when we steered, with a light Easterly breeze, for the West part of Morotoi. In the course of the day, the current, which, from the time we left Karakakooa Bay, had set from the North-East, changed its direction to the South-East.

During the night, the wind was again variable; but early Friday 26th, next morning, it settled at East, and blew so fresh, as to oblige

1779.
February.

oblige us to double-reef the topfails. At seven, on hauling round the West point of Morotoi, we opened a small bay, at the distance of about two leagues, with a fine sandy beach; but seeing no appearance of fresh water, we stood on to the North, in order to get to the windward of Woahoo, an island which we had seen at our first visit, in January 1778.

Saturday 27.

At two in the afternoon, we saw the land, bearing West by North, eight leagues distant; and having tacked as soon as it was dark, we again bore away at day-light on the 27th; and at half past ten, were within a league of the shore, near the middle of the North East side of the island.

The coast, to the Northward, is formed of detached hills, rising perpendicularly from the sea, with ragged and broken summits; the sides covered with wood, and the vallies between them of a fertile and well cultivated appearance. To the Southward, we saw an extensive bay, bounded by a low point of land to the South East, which was covered with cocoa-nut trees; and off it stood a high insulated rock, about a mile from the shore. The haziness of the weather prevented our seeing distinctly the land to the Southward of the point; we could only perceive that it was high and broken.

As the wind continued to blow very fresh, we thought it dangerous to entangle ourselves with a lee-shore; and therefore did not attempt to examine the bay, but hauled up, and steered to the Northward, in the direction of the coast. At noon, we were abreast of the North point of the island, about two leagues from the land, which is low and flat, and has a reef stretching off it to the distance of near a mile and a half. The latitude, by observation, $21^{\circ} 50'$ North, longitude $202^{\circ} 15'$ East; the extreme parts of the island in sight,

fight, bearing South South East, quarter East, and South West by South, three-quarters West.

1779.
February.

Between the North point and a distant head-land, which we saw to the South West, the land bends inward considerably, and appeared likely to afford a good road. We therefore directed our course along the shore, at the distance of about a mile, carrying regular soundings from twenty to thirteen fathoms. At a quarter past two, the sight of a fine river, running through a deep valley, induced us to come to an anchor in thirteen fathoms water, with a sandy bottom; the extreme points of the bay bearing South West by West half West, and North East by East three-quarters East; and the mouth of the river South East half East, one mile distant. In the afternoon, I attended the two Captains on shore, where we found but few of the natives, and those mostly women; the men, they told us, were gone to Morotoi to fight Tahyterree; but that their Chief Perreorancee, who had stayed behind, would certainly visit us, as soon as he heard of our arrival.

We were much disappointed to find the water had a brackish taste, for two hundred yards up the river, owing to the marshy ground through which it empties itself into the sea. Beyond this, it was perfectly fresh, and formed a fine running stream, along the side of which I walked, till I came to the conflux of two small rivulets, that branched off to the right and left of a remarkably steep and romantic mountain. The banks of this river, and indeed the whole we saw of the North West part of Woahoo, are well cultivated, and full of villages; and the face of the country is uncommonly beautiful and picturesque.

1779.
February.

Sunday 28.

As the watering at this place would have been attended with great labour, I was sent to examine the coast to leeward; but not being able to land, on account of a reef of coral, which stretched along the shore to the distance of half a mile, Captain Clerke determined, without farther loss of time, to proceed to Atooi. At eight in the morning, we weighed, and stood to the Northward, till day-light on the 28th, when we bore away for that island, which we were in sight of by noon; and about sunset, were off its Eastern extremity, which shews itself in a fine, green, flat point.

March.
Monday 1.

It being too late to run for the road, on the South West side of the island, where we had been the last year, we passed the night in plying on and off, and at nine the next morning, came to an anchor in twenty-five fathoms water, and moored with the best bower in thirty-eight fathoms, the bluff-head, on the West side of the village, bearing North East by North three-quarters East, two miles distant; the extremes of the island, North West by West three-quarters West, and South East by East half East; the island Oneheow West by South half West. In running down to the road, from the South East point of the island, we saw the appearance of shoal water, in several places, at a considerable distance from the land; and when we were about two miles to the Eastward of the anchoring-place, and two or three miles from the shore, we got into four and half fathoms water, although our soundings had usually been seven and eight fathoms.

We had no sooner anchored in our old station, than several canoes came along-side of us; but we could observe, that they did not welcome us with the same cordiality in their manner, and satisfaction in their countenances, as when we
were

1779.
March.

were here before. As soon as they got on board, one of the men began to tell us, that we had left a disorder amongst their women, of which several persons of both sexes had died. He was himself afflicted with the venereal disease, and gave a very full and minute account of the various symptoms with which it had been attended. As there was not the slightest appearance of that disorder amongst them on our first arrival, I am afraid it is not to be denied, that we were the authors of this irreparable mischief.

Our principal object here was to water the ships with the utmost expedition; and I was sent on shore early in the afternoon, with the pinnace and launch laden with casks. The gunner of the Resolution accompanied me to trade for provisions; and we had a guard of five marines. We found a considerable number of people collected upon the beach, who received us at first with great kindness; but as soon as we had got the casks on shore, began to be exceedingly troublesome. Former experience having taught me how difficult it was to repress this disposition, without having recourse to the authority of their Chiefs, I was very sorry to find, that they were all at another part of the island. Indeed we soon felt the want of their assistance; for it was with great difficulty I was able to form a circle, according to our usual practice, for the convenience and security of the trading party; and had no sooner done it, and posted guards to keep off the crowd, than I saw a man laying hold of the bayonet of one of the soldiers musquets, and endeavouring, with all his force, to wrench it out of his hand. On my coming up to them, the native let go his hold and retired; but returned in a moment, with a spear in one hand, and dagger in the other; and his countrymen had much ado to restrain him from trying his prowess with the soldier. This

1779.
March.

fray was occasioned by the latter's having given the man a slight prick with his bayonet, in order to make him keep without the line.

I now perceived, that our situation required great circumspection and management; and accordingly gave the strictest orders, that no one should fire, nor have recourse to any other act of violence, without positive commands. As soon as I had given these directions, I was called to the assistance of the watering party, where I found the natives equally inclined to mischief. They had demanded from our people a large hatchet for every cask of water; and this not being complied with, they would not suffer the sailors to roll them down to the boats.

I had no sooner joined them, than one of the natives advanced up to me, with great insolence, and made the same claim. I told him, that, as a friend, I was very willing to present him with a hatchet, but that I should certainly carry off the water, without paying any thing for it; and I immediately ordered the pinnacle men to proceed in their business, and called three marines from the traders to protect them.

Though this shew of spirit succeeded so far as to make the natives desist from any open attempt to interrupt us, they still continued to behave in the most teasing and provoking manner. Whilst some of them, under pretence of assisting the men in rolling down the casks, turned them out of their course, and gave them a wrong direction; others were stealing the hats from off the sailors heads, pulling them backward by their clothes, or tripping up their heels; the whole crowd, all this time, shouting and laughing, with a strange mixture of childishness and malice. They afterward
found

found means to steal the cooper's bucket, and took away his bag by force; but the objects they were most eager to possess themselves of, were the musquets of the marines, who were, every instant, complaining of their attempts to force them out of their hands. Though they continued, for the most part, to pay great deference and respect to me, yet they did not suffer me to escape without contributing my share to their stock of plunder. One of them came up to me with a familiar air, and with great management diverted my attention, whilst another, wrenching the hanger, which I held carelessly in my hand, from me, ran off with it like lightning.

1779.
March.

It was in vain to think of repelling this insolence by force; guarding therefore against its effects, in the best manner we were able, we had nothing to do but to submit patiently to it. My apprehensions were, however, a little alarmed, by the information I soon after received from the serjeant of marines, who told me, that, turning suddenly round, he saw a man behind me holding a dagger in the position of striking. In this he might possibly be mistaken; yet our situation was certainly alarming and critical, and the smallest error on our side might have been fatal to us. As our people were separated into three small parties, one at the lake, filling casks; another rolling them down to the shore; and the third, at some distance, purchasing provisions; it had once occurred to me, that it might be proper to collect them all together, and to execute and protect one duty at a time. But on second thoughts, I judged it more adviseable to let them continue as they were. In case of a real attack, our whole force, however advantageously disposed, could have made but a poor resistance. On the other hand, I thought it of some consequence to shew the natives, that we were

1779.
March.

under no fears; and, what was still more material, the crowd was, by this means, kept divided, and a considerable part of them fully employed in bartering provisions.

It is probable, that their dread of the effects of our arms, was the principal cause of their backwardness in attacking us; and indeed the confidence we appeared to place in this advantage, by opposing only five marines to their whole force, must have raised in them a very high idea of our superiority. It was our business to keep up this opinion as much as possible; and in justice to the whole party, I must observe, that no men could possibly behave better, for the purpose of strengthening these impressions. Whatever could be taken in jest, they bore with the utmost temper and patience; and whenever any serious attempt was made to interrupt them, they opposed it with bold looks and menaces. By this management, we succeeded so far, as to get all the casks down to the water side, without any material accident.

While we were getting them into the launch, the natives, perceiving the opportunity of plundering would soon be over, became every moment more daring and insolent. On this occasion, I was indebted to the serjeant of marines for suggesting to me, the advantage that would arise from sending off his party first into the boats; by which means, the musquets of the soldiers, which, as I have already mentioned, were the objects the islanders had principally in view, would be removed out of their reach; and in case of an attack, the marines themselves might be employed more effectually in our defence, than if they were on shore.

We had now got every thing into the boats, and only Mr. Anderson the gunner, a seaman of the boat's crew, and myself,

myself, remained on shore. As the pinnacle lay beyond the surf, through which we were obliged to swim, I told them to make the best of their way to it, and that I should follow them.

1779.
March.

With this order I was surprized to find them both refuse to comply; and the consequence was a contest amongst us, who should be the last on shore. It seems, that some hasty words I had just before used to the sailor, which he thought reflected on his courage, was the cause of this odd fancy in him; and the old gunner, finding a point of honour started, thought he could not well avoid taking a part in it. In this ridiculous situation we might have remained some time, had not our dispute been soon settled by the stones that began to fly about us, and by the cries of the people from the boats, to make haste, as the natives were following us into the water with clubs and spears. I reached the side of the pinnacle first, and finding Mr. Anderson was at some distance behind, and not yet entirely out of danger, I called out to the marines, to fire one musquet. In the hurry of executing my orders, they fired two; and when I got into the boat, I saw the natives running away, and one man, with a woman sitting by him, left behind on the beach. The man made several attempts to rise, without being able; and it was with much regret, I perceived him to be wounded in the groin. The natives soon after returned, and surrounded the wounded man, brandishing their spears and daggers at us, with an air of threatening and defiance; but before we reached the ships, we saw some persons, whom we supposed to be the Chiefs, now arrived, driving them away from the shore.

During our absence, Captain Clerke had been under the greatest anxiety for our safety. And these apprehensions
were

1779.
March.

were considerably increased, from his having entirely mistaken the drift of the conversation he had held with some natives who had been on board. The frequent mention of the name of Captain Cook, with other strong and circumstantial descriptions of death and destruction, made him conclude, that the knowledge of the unfortunate events at Owhyhee had reached them, and that these were what they alluded to; whereas all they had in view was, to make known to him the wars that had arisen, in consequence of the goats that Captain Cook had left at Oneeheow, and the slaughter of the poor goats themselves, during the struggle for the property of them. Captain Clerke, applying this earnestness of conversation, and these terrible representations, to our calamitous transactions at Owhyhee, and to an indication of revenge, kept his telescope fixed upon us, and the moment he saw the smoke of the musquets, ordered the boats to be manned and armed, and to put off to our assistance.

Tuesday 2.

The next morning, I was again ordered on shore, with the watering party. The risk we had run the preceding day determined Captain Clerke to send a considerable force from both ships for our guard, amounting in all to forty men under arms. This precaution, however, was now unnecessary; for we found the beach left entirely to ourselves, and the ground between the landing place and the lake, *tabooed* with small white flags. We concluded, from this appearance, that some of the Chiefs had certainly visited this quarter; and that, not being able to stay, they had kindly and considerately taken this step, for our greater security and convenience. We saw several men armed with long spears and daggers, on the other side of the river, on our right; but they did not offer to give us the least molestation. Their
women

women came over, and sat down on the banks close by us, and at noon we prevailed on some of the men to bring hogs and roots for our people, and to dress them for us. As soon as we had left the beach, they came down to the sea-side, and one of them threw a stone at us; but his conduct seeming to be highly disapproved of by all the rest, we did not think it proper to shew any resentment.

1779.
March.

The next day, we completed our watering, without meeting with any material difficulty. On our return to the ships, we found that several Chiefs had been on board, and had made excuses for the behaviour of their countrymen, attributing their riotous conduct to the quarrels which subsisted at that time amongst the principal people of the island, and which had occasioned a general want of order and subordination amongst them. The government of Atooi was in dispute between Toneoneo, who had the supreme power when we were here last year, and a boy named Teavee. They are both, by different fathers, the grandsons of Perreorannee, king of Woahoo, who had given the government of Atooi to the former, and that of Oneecheow to the latter. The quarrel had arisen about the goats we had left at Oneecheow the last year; the right of property in which was claimed by Toneoneo, on the pretence of that island's being a dependency of his. The friends of Teavee insisting on the right of possession, both parties prepared to maintain their pretensions by force; and, a few days before our arrival, a battle had been fought, in which Toneoneo had been worsted. The consequence of this victory was likely to affect Toneoneo in a much deeper manner than by the mere loss of the objects in dispute; for the mother of Teavee, having married a second husband, who was a Chief of Atooi, and at the head of a powerful faction there, he

†

thought

Wednes. 3.

1779.
March.

thought that the present opportunity was not to be neglected, of driving Toneconco entirely out of the island, and of advancing his son-in-law to the government. I have already had occasion to mention, that the goats, which had increased to the number of six, and would, probably, in a few years, have stocked all these islands, were destroyed in the contest.

Thursday 4.

On the 4th, the mother and sister of the young prince and his father-in-law, with many other Chiefs of that party, came on board the Resolution, and made several curious and valuable presents to Captain Clerke. Amongst the former, were some fish-hooks, which they assured us were made of the bones of our old friend Terrecoboo's father, who had been killed in an unsuccessful descent upon the island of Woahoo; and a fly flap, presented to him by the prince's sister, the handle of which was a human bone, that had been given her as a trophy by her father-in-law. Young Teavee was not of the company, being engaged, as we were told, in performing some religious ceremonies, in consequence of the victory he had obtained, which were to last twenty days.

Friday 5.
Saturday 6.

This, and the two following days, were employed on shore, in completing the Discovery's water; and the carpenters were busy on board, in caulking the ships, and in making other preparations for our next cruise. The natives desisted from giving us any further disturbance; and we procured from them a plentiful supply of pork and vegetables.

At this time, an Indian brought a piece of iron on board the Discovery to be fashioned into the shape of a *pabooa*. It was carefully examined both by the officers and men, and appeared to be the bolt of some large ship timbers.

They were not able to discover to what nation it belonged; but from the pale colour* of the iron, and its not corresponding in shape to our bolts, they concluded that it certainly was not English. This led them to make a strict inquiry of the native, when and where he got it; and if they comprehended him right, it had been taken out of a piece of timber, larger than the cable bit, to which he pointed. This piece of wood, they farther understood from him to have been driven upon their island, since we were here in January 1778.

1779.
March.

On the 7th, we were surprized with a visit from Toneo- Sunday 7.
neo. When he heard the dowager princess was in the ship, it was with great difficulty we could prevail on him to come on board, not from any apprehension that he appeared to entertain of his safety, but from an unwillingness to see her. Their meeting was with sulky and lowering looks on both sides. He staid but a short time, and seemed much dejected; but we remarked, with some surprize, that the women, both at his coming and going away, prostrated themselves before him; and that he was treated by all the natives on board with the respect usually paid to those of his rank. Indeed, it must appear somewhat extraordinary, that a person, who was at this time in a state of actual hostility with Teavee's party, and was even prepared for another battle, should trust himself almost alone within the power of his enemies. It is, therefore, to be observed, that the civil dissensions, which are very frequent throughout all the South Sea Islands, seem to be carried on without much acrimony or bloodshed; and that the deposed governor still continues to enjoy the rank of an *Eree*, and is left to make

* It was evident, that the iron we found in possession of the natives at Nootka Sound, and which was mostly made into knives, was of a much paler sort than ours.

1779.
March.

use of such means as may arise for the regaining his lost consequence. But I shall have occasion to speak more particularly on this subject in the next chapter; in which the best account will be given, which we were able to collect, of the political state of those countries.

Monday 8.

On the 8th, at nine in the morning, we weighed, and sailed toward Oneecheow; and, at three in the afternoon, anchored in twenty fathoms water, nearly on the same spot as in the year 1778. We moored with the other anchor in twenty-six fathoms water. The high bluff, on the South end of the island, bore East South East; the North point of the road, North half East; and a bluff head to the South of it, North East by North. During the night, we had a strong

Tuesday 9.

gale from the Eastward; and, in the morning of the 9th, found the ship had driven a whole cable's length, and brought both anchors almost ahead. We shortened in the best bower cable; but the wind blowing too fresh to un-

Wednesd. 10.
Thursday 11.

moor, we were obliged to remain this and the two following days, with the anchors still ahead.

Friday 12.

On the 12th, the weather being moderate, the master was sent to the North West side of the island, to look for a more convenient place for anchoring. He returned in the evening, having found, close round the West point of the road where we now lay, which is also the Westernmost point of the island, a fine bay, with good anchorage, in eighteen fathoms water, a clear sandy bottom, not a mile from the beach, on which the surf beats, but not so as to hinder landing. The direction of the points of the bay were North by East, and South by West; and, in that line, the soundings seven, eight, and nine fathoms. On the North side of the bay was a small village; and a quarter of a mile to the

1779.
March.

the Eastward were four small wells of good water; the road to them level, and fit for rolling casks. Mr. Bligh went afterward so far to the North as to satisfy himself, that Oreehoua was a separate island from Oneeheow; and that there was a passage between them; which, before, we only conjectured to exist.

In the afternoon we hoisted in all the boats, and made ready for going to sea in the morning.

C H A P. VI.

General Account of the Sandwich Islands.—Their Number, Names, and Situation.—OWHYHEE.—Its Extent, and Divison into Districts.—Account of its Coasts, and the adjacent Country.—Volcanic Appearances. — Snowy Mountains.—Their Height determined.—Account of a Journey into the interior Parts of the Country.—MOWEE.—TAHOOROWA.—MOROTOI.—RANAI.—WOAHOO.—ATOOI.—ONEEHOW.—OREEHOUA.—TAHOORA.—Climate.—Winds.—Currents.—Tides.—Animals and Vegetables.—Astronomical Observations.

1779.
March.

AS we are now about to take our final leave of the Sandwich Islands, it will not be improper to introduce here some general account of their situation and natural history, and of the manners and customs of the inhabitants.

This subject has indeed been, in some measure, pre-occupied by persons far more capable of doing it justice, than I can pretend to be. Had Captain Cook and Mr. Anderson lived to avail themselves of the advantages which we enjoyed by a return to these islands, it cannot be questioned, that the Public would have derived much additional information from the skill and diligence of two such accurate observers. The reader will therefore lament with me our common misfortune, which hath deprived him of the labours of such superior abilities, and imposed on me the task of presenting him with the best supplementary account the various duties of my station permitted me to furnish.

This

1779.
March.

This group consists of eleven islands, extending in latitude from $18^{\circ} 54'$ to $22^{\circ} 15'$ North; and in longitude from $199^{\circ} 36'$ to $205^{\circ} 06'$ East. They are called by the natives; 1. Owhyhee. 2. Mowee. 3. Ranai, or Oranai. 4. Morotinne, or Morokinnee. 5. Kahowrowee, or Tahoorowa. 6. Morotoi, or Morokoi. 7. Woahoo, or Oahoo. 8. Atooi, Atowi, or Towi, and sometimes Kowi *. 9. Neeheehow, or Oneeheow. 10. Oreehoua, or Reehoua; and, 11. Tahooraa; and are all inhabited, excepting Morotinne and Tahooraa. Besides the islands above enumerated, we were told by the Indians, that there is another called MODOOPAPAPA †, or KOMODOOPAPAPA, lying to the West South West of Tahooraa, which is low and sandy, and visited only for the purpose of catching turtle and sea-fowl; and, as I could never learn that they knew of any others, it is probable that none exist in their neighbourhood.

They were named by Captain Cook the *Sandwich Islands*, in honour of the EARL of SANDWICH, under whose administration he had enriched geography with so many splendid and important discoveries; a tribute justly due to that noble person for the liberal support these voyages derived from his power, in whatever could extend their utility, or promote their success; for the zeal with which he seconded the views of that great navigator; and, if I may be allowed to add the voice of private gratitude, for the generous protection, which, since the death of their unfortunate commander, he has afforded all the officers that served under him.

Owhyhee, the Easternmost, and by much the largest, of these islands, is of a triangular shape, and nearly equilate-

* It is to be observed, that, among the windward Islands, the *k* is used instead of the *t*, as *Morokoi* instead of *Morotoi*, &c.

† *Modoo* signifies island; *papapa*, flat. This island is called *Tammatapappa*, by Captain Cook, vol. II. p. 222.

1779.
March.

ral. The angular points make the North, East, and South extremities, of which the Northern is in latitude $20^{\circ} 17'$ North, longitude $204^{\circ} 02'$ East: the Eastern in latitude $19^{\circ} 34'$ North, longitude $205^{\circ} 06'$ East: and the Southern extremity in latitude $18^{\circ} 54'$ North, longitude $204^{\circ} 15'$ East. Its greatest length, which lies in a direction nearly North and South, is $28\frac{1}{2}$ leagues; its breadth is 24 leagues; and it is about 255 geographical, or 293 English miles, in circumference. The whole island is divided into six large districts; Amakooa and Aheedoo, which lie on the North East side; Apooa and Kaoo on the South East; Akona and Koaarra on the West.

The districts of Amakooa and Aheedoo are separated by a mountain called Mouna Kaah (or the mountain Kaah), which rises in three peaks, perpetually covered with snow, and may be clearly seen at 40 leagues distance.

To the North of this mountain the coast consists of high and abrupt cliffs, down which fall many beautiful cascades of water. We were once flattered with the hopes of meeting with a harbour round a bluff head, in latitude $20^{\circ} 10'$ North, and longitude $204^{\circ} 26'$ East: but, on doubling the point, and standing close in, we found it connected by a low valley, with another high head to the North West. The country rises inland with a gentle ascent, is intersected by deep narrow glens, or rather chasms, and appeared to be well cultivated and sprinkled over with a number of villages. The snowy mountain is very steep, and the lower part of it covered with wood.

The coast of Aheedoo, which lies to the South of Mouna Kaah, is of a moderate height, and the interior parts appear more even than the country to the North West, and less broken by ravines. Off these two districts we cruized for al-

most a month; and, whenever our distance from shore would permit it, were sure of being surrounded by canoes laden with all kinds of refreshments. We had frequently a very heavy sea, and great swell on this side of the island, and as we had no soundings, and could observe much foul ground off the shore, we never approached nearer the land than two or three leagues, excepting on the occasion already mentioned.

1779.
March.

The coast to the North East of Apoona, which forms the Eastern extremity of the island, is low and flat; the acclivity of the inland parts is very gradual, and the whole country covered with cocoa-nut and bread-fruit trees. This, as far as we could judge, is the finest part of the island, and we were afterward told that the king had a place of residence here. At the South West extremity the hills rise abruptly from the sea-side, leaving but a narrow border of low ground toward the beach. We were pretty near the shore at this part of the island, and found the sides of the hills covered with a fine verdure; but the country seemed to be very thinly inhabited. On doubling the East point of the island, we came in sight of another snowy mountain, called Mouna Roa (or the extensive mountain), which continued to be a very conspicuous object all the while we were sailing along the South East side. It is flat at the top, making what is called by mariners table-land: the summit was constantly buried in snow, and we once saw its sides also slightly covered for a considerable way down; but the greatest part of this disappeared again in a few days.

According to the tropical line of snow, as determined by Mr. Condamine, from observations taken on the Cordilleras, this mountain must be at least 16,020 feet high, which exceeds

1779.
March.

ceeds the height of the Pico de Teyde, or Peak of Teneriffe, by 724 feet, according to Dr. Heberden's computation, or 3680, according to that of the Chevalier de Borda. The peaks of Mouna Kaah appeared to be about half a mile high; and as they are entirely covered with snow, the altitude of their summits cannot be less than 18,400 feet. But it is probable that both these mountains may be considerably higher. For, in insular situations, the effects of the warm sea air must necessarily remove the line of snow, in equal latitudes, to a greater height than where the atmosphere is chilled on all sides by an immense tract of perpetual snow.

The coast of Kaoo presents a prospect of the most horrid and dreary kind: the whole country appearing to have undergone a total change from the effects of some dreadful convulsion. The ground is every where covered with cinders, and intersected in many places with black streaks, which seem to mark the course of a lava that has flowed, not many ages back, from the mountain Roa to the shore. The Southern promontory looks like the mere dregs of a volcano. The projecting head-land is composed of broken and craggy rocks, piled irregularly on one another, and terminating in sharp points.

Notwithstanding the dismal aspect of this part of the island, there are many villages scattered over it, and it certainly is much more populous than the verdant mountains of Apooa. Nor is this circumstance hard to be accounted for. As these islanders have no cattle, they have consequently no use for pasturage, and therefore naturally prefer such ground, as either lies more convenient for fishing, or is best suited to the cultivation of yams and plantains. Now amidst these ruins, there are many patches of rich soil, which are care-

1779.
March.

fully laid out in plantations, and the neighbouring sea abounds with a variety of most excellent fish, with which, as well as with other provisions, we were always plentifully supplied. Off this part of the coast we could find no ground, at less than a cable's length from the shore, with a hundred and sixty fathoms of line, excepting in a small bight to the Eastward of the South point, where we had regular soundings of fifty and fifty-eight fathoms over a bottom of fine sand. Before we proceed to the western districts, it may be necessary to remark, that the whole coast side of the island, from the Northern to the Southern extremity, does not afford the smallest harbour or shelter for shipping.

The South West parts of Akona are in the same state with the adjoining district of Kaoo; but farther to the North, the country has been cultivated with great pains, and is extremely populous.

In this part of the island is situated Karakakooa Bay, which has been already described. Along the coast nothing is seen but large masses of slag, and the fragments of black scorched rocks; behind which, the ground rises gradually for about two miles and a half, and appears to have been formerly covered with loose burnt stones. These the natives have taken the pains of clearing away, frequently to the depth of three feet and upward; which labour, great as it is, the fertility of the soil amply repays. Here, in a rich ashy mould, they cultivate sweet potatoes, and the clove-plant. The fields are inclosed with stone-fences, and are interspersed with groves of cocoa-nut trees. On the rising ground beyond these, the bread-fruit trees are planted, and flourish with the greatest luxuriance.

1779.
March.

Koaara extends from the Westernmost point to the Northern extremity of the island; the whole coast between them forming an extensive bay, called Toe-yah-yah, which is bounded to the North by two very conspicuous hills. Toward the bottom of this bay there is foul, corally ground, extending upward of a mile from the shore, without which the soundings are regular, with good anchorage, in twenty fathoms. The country, as far as the eye could reach, seemed fruitful and well inhabited, the soil being in appearance of the same kind with the district of Kaoo; but no fresh water is to be got here.

I have hitherto confined myself to the coasts of this island; and the adjacent country, which is all that I had an opportunity of being acquainted with from my own observation. The only account I can give of the interior parts, is from the information I obtained from a party, who set out, on the afternoon of the 26th of January, on an expedition up the country, with an intention of penetrating as far as they could; and principally of reaching, if possible, the snowy mountains.

Having procured two natives to serve them as guides, they left the village about four o'clock in the afternoon, directing their course a little to the Southward of the East. To the distance of three or four miles from the bay, they found the country as before described; the hills afterward rose with a more sudden ascent, which brought them to the extensive plantations, that terminate the view of the country, as seen from the ships.

These plantations consist of the * tarrow or eddy root, and the sweet potatoe, with plants of the cloth-tree, neatly
set

* Both the sweet potatoes, and the tarrow, are here planted four feet from each other: the former was earthed up almost to the top of the stalk, with about half a
bushel

1779.
March.

set out in rows. The walls that separate them are made of the loose burnt stones, which are got in clearing the ground; and, being entirely concealed by sugar-canes, planted close on each side, make the most beautiful fences that can be conceived. The party stopped for the night at the second hut they found amongst the plantations, where they judged themselves to be about six or seven miles from the ships. They described the prospect from this spot as very delightful; they saw the ships in the bay before them; to the left, a continued range of villages, interspersed with groves of cocoa-nut trees, spreading along the sea-shore; a thick wood stretching out of sight behind them; and to the right, an extent of ground laid out in regular and well cultivated plantations, as far as the eye could reach.

Near this spot, at a distance from any other dwelling, the natives pointed out to them the residence of an hermit, who, they said, had formerly been a great Chief and warrior, but had long ago quitted the shores of the island, and now never stirred from his cottage. They prostrated themselves as they approached him, and afterward presented to him a part of such provisions as they had brought with them. His behaviour was easy and cheerful; he scarce shewed any marks of astonishment at the sight of our people, and though pressed to accept some of our curiosities, he

buskel of light mould; the latter is left bare to the root, and the mould round it is made in the form of a basin, in order to hold the rain-water, as this root requires a certain degree of moisture. It has been before observed, that the tarrow, at the Friendly and Society Islands, was always planted in low and moist situations, and, generally, where there was the conveniency of a rivulet to flood it. It was imagined that this mode of culture was absolutely necessary; but we now found, that, with the precaution above mentioned, it succeeds equally well in a drier situation: indeed, we all remarked, that the tarrow of the Sandwich Islands is the best we had ever tasted. The plantains are not admitted in these plantations, but grow amongst the bread-fruit trees.

1779.
March.

declined the offer, and soon withdrew to his cottage. He was described as by far the oldest person any of the party had ever seen, and judged to be, by those who computed his age at the lowest, upward of 100 years old.

As our people had imagined the mountain not to be more than ten or twelve miles from the bay, and consequently, that they should reach it with ease early the next morning, an error into which its great height had probably led them, they were now much surprised to find the distance scarce perceptibly diminished. This circumstance, together with the uninhabited state of the country they were going to enter, made it necessary to procure a supply of provisions; and for that purpose they dispatched one of their guides back to the village. Whilst they were waiting his return, they were joined by some of Kaoo's servants, whom that benevolent old man had sent after them, as soon as he heard of their journey, laden with refreshments, and authorized, as their route lay through his grounds, to demand and take away whatever they might have occasion for.

Our travellers were much astonished to find the cold here so intense; but having no thermometer with them, could judge of it only by their feelings; which, from the warm atmosphere they had left, must have been a very fallacious measure. They found it, however, so cold, that they could get but little sleep, and the natives none at all; both parties being disturbed, the whole night, by continued coughing. As they could not, at this time, be at any very considerable height, the distance from the sea being only six or seven miles, and part of the road on a very moderate ascent, this extraordinary degree of cold must be ascribed to the easterly wind blowing fresh over the snowy mountains.

Early

1779.
March.

Saturday 27.

Early on the 27th, they set out again, and filled their calabashes at an excellent well about half a mile from their hut. Having passed the plantations, they came to a thick wood, which they entered by a path made for the convenience of the natives, who go thither to fetch the wild or horse-plantain, and to catch birds. Their progress now became very slow, and attended with much labour; the ground being either swampy, or covered with large stones, the path narrow, and frequently interrupted by trees lying across it, which it was necessary to climb over, the thickness of the under-wood, on both sides, making it impossible to pass round them. In these woods they observed, at small distances, pieces of white cloth fixed on poles, which they supposed to be land-marks for the division of property, as they only met with them where the wild plantains grew. The trees, which are of the same kind with those we called the spice-tree at New Holland, were lofty and straight, and from two to four feet in circumference.

After they had advanced about ten miles in the wood, they had the mortification to find themselves, on a sudden, within sight of the sea, and at no great distance from it; the path having turned imperceptibly to the Southward, and carried them to the right of the mountain, which it was their object to reach. Their disappointment was greatly increased by the uncertainty they were now under of its true bearings, since they could not, at this time, get a view of it from the top of the highest trees. They, therefore, found themselves obliged to walk back six or seven miles to an unoccupied hut, where they had left three of the natives, and two of their own people, with the small stock that remained of their provisions. Here they spent the second night; and the air was so very sharp, and so little to the liking

1779.
March.

liking of their guides, that, by the morning, they had all taken themselves off, except one.

The want of provisions now making it necessary to return to some of the cultivated parts of the island, they quitted the wood by the same path they had entered it; and, on their arrival at the plantations, were surrounded by the natives, of whom they purchased a fresh stock of necessaries; and prevailed upon two of them to supply the place of the guides that were gone away. Having obtained the best information in their power, with regard to the direction of their road, the party being now nine in number, marched along the skirts of the wood for six or seven miles, and then entered it again by a path that bore to the Eastward. For the first three miles, they passed through a forest of lofty spice-trees, growing on a strong rich loam; at the back of which they found an equal extent of low shrubby trees, with much thick underwood, on a bottom of loose burnt stones. This led them to a second forest of spice-trees, and the same rich brown soil, which was again succeeded by a barren ridge of the same nature with the former. This alternate succession may, perhaps, afford matter of curious speculation to naturalists. The only additional circumstance I could learn relating to it was, that these ridges appeared, as far as they could be seen, to run in directions parallel to the sea-shore, and to have Mouna Roa for their centre.

In passing through the woods, they found many canoes half-finished; and, here and there, a hut; but saw none of the inhabitants. Having penetrated near three miles into the second wood, they came to two huts, where they stopped, exceedingly fatigued with the day's journey, having walked not less than twenty miles, according to their own computation. As they had met with no springs, from the time
they

1779.
March.

they left the plantation-ground, and began to suffer much from the violence of their thirst, they were obliged, before the night came on, to separate into parties, and go in search of water; and, at last, found some, left by rain in the bottom of an unfinished canoe; which, though of the colour of red wine, was to them no unwelcome discovery. In the night, the cold was still more intense than they had found it before; and though they had wrapped themselves up in mats and cloths of the country, and kept a large fire between the two huts, they could yet sleep but very little; and were obliged to walk about the greatest part of the night. Their elevation was now probably pretty considerable, as the ground on which they had travelled had been generally on the ascent.

On the 29th, at day-break, they set out, intending to make their last and utmost effort to reach the snowy mountain; but their spirits were much depressed, when they found they had expended the miserable pittance of water they had found the night before. The path, which extended no farther than where canoes had been built, was now at an end; and they were therefore obliged to make their way as well as they could; every now and then climbing up into the highest trees, to explore the country round. At eleven o'clock, they came to a ridge of burnt stones, from the top of which they saw the snowy mountain, appearing to be about twelve or fourteen miles from them.

It was here deliberated, whether they should proceed any further, or rest satisfied with the view they now had of Mouna Roa. The road, ever since the path ceased, had become exceedingly fatiguing; and, every moment they advanced; was growing still more so. The deep chinks, with which the ground was every where broken, being slightly covered

1779.
March.

covered with moss, made them stumble at almost every step; and the intermediate space was a surface of loose burnt stones, which broke under their feet like potsherds. They threw stones into several of these chinks; which, by the noise they made, seemed to fall to a considerable depth, and the ground sounded hollow under their feet. Besides these discouraging circumstances, they found their guides so averse to going on, that they believed, whatever their own determinations might have been, they could not have prevailed on them to remain out another night. They, therefore, at last agreed to return to the ships, after taking a view of the country, from the highest trees which the place afforded. From this elevation they saw themselves surrounded, on all sides, with wood toward the sea; they could not distinguish, in the horizon, the sky from the water; and between them and the snowy mountain, was a valley about seven or eight miles broad, above which the mountain appeared only as a hill of a moderate size.

They rested this night at a hut in the second wood, and on the 30th, before noon, they had got clear of the first, and found themselves about nine miles to the North East of the ships, toward which they directed their march through the plantations. As they passed along, they did not observe a single spot of ground, that was capable of improvement, left unplanted; and, indeed, it appeared, from their account, hardly possible for the country to be cultivated to greater advantage for the purposes of the inhabitants, or made to yield them a larger supply of necessaries for their subsistence. They were surprized to meet with several fields of hay; and on inquiring to what uses it was applied, were told, it was designed to cover the young tarrow grounds, in order

1779.
March.

order to preserve them from being scorched by the sun. They saw a few scattered huts amongst the plantations, which served for occasional shelter to the labourers; but no villages at a greater distance than four or five miles from the sea. Near one of them, about four miles from the bay, they found a cave, forty fathoms long, three broad, and of the same height. It was open at both ends; the sides were fluted, as if wrought with a chissel, and the surface glazed over, probably by the action of fire.

Having given this account of the most material circumstances that occurred on the expedition to the snowy mountain, I shall now return to the other islands that remain to be described.

The island next in size, and nearest in situation, to Owhyhee, is MOWEE; which lies at the distance of eight leagues North North West from the former, and is 140 geographical miles in circumference. A low isthmus divides it into two circular peninsulas, of which that to the East is called Whamadooda, and is double the size of the Western peninsula called Owhyrookoo. The mountains in both rise to an exceeding great height, having been seen by us at the distance of upward of thirty leagues. The Northern shores, like those of Owhyhee, afford no foundings; and the country presents the same appearance of verdure and fertility. To the South East, between this and the adjacent isles, we had regular depths with a hundred and fifty fathoms, with a sandy bottom. From the West point, which is low, runs a shoal, stretching out toward Ranai, to a considerable distance; and to the Southward of this, is a fine spacious bay, with a sandy beach, shaded with cocoa-nut trees. It is probable that good anchorage might be found here, with shel-

1779.
March.

ter from the prevailing winds, and that the beach affords a convenient place for landing. The country behind presents a most romantic appearance. The hills rise almost perpendicularly, in a great variety of peaked forms; and their steep sides, and the deep chasms between them, are covered with trees, amongst which those of the bread-fruit were observed particularly to abound. The tops of these hills are entirely bare, and of a reddish brown colour. We were informed by the natives, that there is an harbour to the Southward of the East point, which they affirmed to be superiour to that of Karakakooa; and we were also told, that, on the North West side, there was another harbour, called Keepoo-keepoo.

Tahoorowa is a small island lying off the South West part of Mowee, from which it is distant three leagues. This island is destitute of wood, and the soil seems to be sandy and barren. Between Tahowrowa and Mowee lies the small uninhabited island Morrotinne.

Morotoi is only two leagues and a half from Mowee to the West North West. The South Western coast, which was the only part near which we approached, is very low; but the land rises backward to a considerable height; and, at the distance from which we saw it, appeared to be entirely without wood. Its produce, we were told, consists chiefly of yams. It may, probably, have fresh water, and, on the South and West sides, the coast forms several bays, that promise good shelter from the trade winds.

Ranai is about three leagues distant from Mowee and Morotoi, and lies to the South West of the passage between these islands. The country, to the South, is high and craggy; but the other parts of the island had a better as-

pect, and appeared to be well inhabited. We were told that it produces very few plantains, and bread-fruit trees ; but that it abounds in roots, such as yams, sweet potatoes, and tarrow.

1779.
March.

Woahoo lies to the North West of Morotoi, at the distance of about seven leagues. As far as we could judge, from the appearance of the North East and North West parts (for we saw nothing of the Southern side), it is by far the finest island of the whole group. Nothing can exceed the verdure of the hills, the variety of wood and lawn, and rich cultivated vallies, which the whole face of the country displayed. Having already given a description of the bay, formed by the North and West extremities, in which we came to anchor, I have only to observe, that in the bight of the bay, to the South of the anchoring-place, we found rocky foul ground, two miles from the shore. Should the ground tackling of a ship be weak, and the wind blow strong from the North, to which quarter the road is entirely open, this circumstance might be attended with some danger ; but with good cables there would be little risk, as the ground from the anchoring-place, which is opposite to the valley through which the river runs, to the North point, is a fine sand.

Atooi lies to the North West of Woahoo, and is distant from it about twenty-five leagues. The face of the country, to the North East and North West, is broken and ragged ; but to the South it is more even ; the hills rise with a gentle slope from the sea-side, and, at some distance back, are covered with wood. Its productions are the same with those of the other islands ; but the inhabitants far surpass all the neighbouring islanders in the management of their plantations.

1779.
March.

ations. In the low grounds, adjoining to the bay where we lay at anchor, these plantations were divided by deep and regular ditches; the fences were made with a neatness approaching to elegance, and the roads through them were thrown up and finished, in a manner that would have done credit to any European engineer.

Oneeheow lies five leagues to the Westward of Attooi. The Eastern coast is high, and rises abruptly from the sea, but the rest of the island consists of low ground; excepting a round bluff head on the South East point. It produces abundance of yams, and of the sweet root called *Tee*; but we got from it no other sort of provisions.

Oreehoua, and Tahoorā, are two small islands in the neighbourhood of Oneeheow. The former is a single high hummock, joined by a reef of coral rocks to the Northern extremity of Oneeheow. The latter lies to the South East, and is uninhabited.

The climate of the Sandwich Islands differs very little from that of the West India Islands, which lie in the same latitude. Upon the whole, perhaps, it may be rather more temperate. The thermometer, on shore in Karakakooa Bay, never rose higher than 88° , and that but one day; its mean height, at noon, was 83° . In Wymoa Bay, its mean height at noon was 76° , and when out at sea, 75° . The mean height of the thermometer at noon, in Jamaica, is about 86° , at sea 80° .

Whether they be subject to the same violent winds and hurricanes, we could not discover, as we were not there in any of the stormy months. However, as the natives gave us no positive testimony of the fact, and no traces of their effects were any where visible, it is probable that, in this respect,

respect, they resemble the Society and Friendly Islands, which are, in a great measure, free from these dreadful visitations.

1779.
March.

During the four winter months that we remained amongst these islands, there was more rain, especially in the interior parts, than usually falls during the dry season in the islands of the West Indies. We generally saw clouds collecting round the tops of the hills, and producing rain to leeward; but after they are separated from the land by the wind, they disperse, and are lost, and others succeed in their place. This happened daily at Owhyhee: the mountainous parts being generally enveloped in a cloud; successive showers falling in the inland country; with fine weather, and a clear sky at the sea-shore.

The winds in general were, from East South East to North East; though this sometimes varied a few points each way to the North and South; but these were light, and of short duration. In the harbour of Karakakooa, we had a constant land and sea-breeze every day and night.

The currents seemed very uncertain; sometimes setting to windward; and, at other times, to leeward, without any regularity. They did not appear to be governed by the winds, nor any other cause that I can assign: they frequently set to windward against a fresh breeze.

The tides are very regular, flowing and ebbing six hours each. The flood comes from the Eastward; and it is high water at the full and change of the moon, forty-five minutes past three, apparent time. Their greatest rise is two feet seven inches; and we always observed the water to be four inches higher when the moon was above the horizon, than when it was below.

1779.
March.

The quadrupeds in these, as in all the other islands that have been discovered in the South sea, are confined to three sorts, dogs, hogs, and rats. The dogs are of the same species with those of Otaheite, having short crooked legs, long backs, and pricked ears. I did not observe any variety in them, except in their skins; some having long and rough hair, and others being quite smooth. They are about the size of a common turnspit; exceedingly sluggish in their nature; though perhaps this may be more owing to the manner in which they are treated, than to any natural disposition in them. They are, in general, fed, and left to herd, with the hogs; and I do not recollect one instance in which a dog was made a companion in the manner we do in Europe. Indeed, the custom of eating them is an insuperable bar to their admission into society, and as there are neither beasts of prey in the island, nor objects of chase, it is probable, that the social qualities of the dog, its fidelity, attachment, and sagacity, will remain unknown to the natives.

The number of dogs in these islands did not appear to be nearly equal, in proportion, to those in Otaheite. But on the other hand, they abound much more in hogs; and the breed is of a larger and weightier kind. The supply of provisions of this kind, which we got from them, was really astonishing. We were near four months, either cruising off the coast, or in harbour at Owhyhee. During all this time, a large allowance of fresh pork was constantly served to both crews: so that our consumption was computed at about sixty puncheons of five hundred weight each. Besides this, and the incredible waste which, in the midst of such plenty, was not to be guarded against, sixty puncheons more were salted for sea store. The greatest part of this supply was
drawn

drawn from the island of Owhyhee alone; and yet we could not perceive that it was at all drained, or even that the abundance had any way decreased.

1779.
March.

The birds of these islands are as beautiful as any we have seen during the voyage, and are numerous, though not various. There are four, which seem to belong to the *trochili*, or honey-suckers of Linnæus; one of which is something larger than a bullfinch; its colour is a fine glossy black, the rump-vent and thighs a deep yellow. It is called by the natives *hoo-hoo*. Another is of an exceeding bright scarlet colour; the wings black, and edged with white; and the tail black; its native name is *eeeeve*. A third, which seems to be either a young bird, or a variety of the foregoing, is variegated with red, brown, and yellow. The fourth is entirely green, with a tinge of yellow, and is called *akaiearooa*. There is a species of thrush, with a grey breast; and a small bird of the flycatcher kind; a rail, with very short wings and no tail, which, on that account, we named *rallus ecaudatus*. Ravens are found here, but they are very scarce; their colour is dark brown, inclining to black; and their note is different from the European. Here are two small birds, both of one *genus*, that are very common; one is red, and generally seen about the cocoa-nut trees, particularly when they are in flower, from whence it seems to derive great part of its subsistence; the other is green; the tongues of both are long and ciliated, or fringed at the tip. A bird with a yellow head, which, from the structure of its beak, we called a parroquet, is likewise very common. It, however, by no means belongs to that tribe, but greatly resembles the *lexia flavicans*, or yellowish cross-bill of Linnæus.

Here

1779
March.

Here are also owls, plovers of two sorts, one very like the whistling plover of Europe; a large white pigeon; a bird with a long tail, whose colour is black, the vent and feathers under the wing (which is much longer than is usually seen in the generality of birds, except the birds of paradise) are yellow; and the common water or darker hen.

Their vegetable productions are nearly the same with the rest of the South-sea islands. I have before mentioned, that the *tarrow* root is much superiour to any we had before tasted, and that we attributed this excellence to the dry method of cultivating it. The bread-fruit trees thrive here, not in such abundance, but produce double the quantity of fruit they do on the rich plains of Otaheite. The trees are nearly of the same height, but the branches begin to strike out from the trunk much lower, and with greater luxuriance. Their sugar-canes are also of a very unusual size. One of them was brought to us at Atooi, measuring eleven inches and a quarter in circumference; and having fourteen feet eatable.

At Oneeheow they brought us several large roots of a brown colour, shaped like a yam, and from six to ten pounds in weight. The juice, which it yields in great abundance, is very sweet, and of a pleasant taste, and was found to be an excellent substitute for sugar. The natives are very fond of it, and use it as an article of their common diet; and our people also found it very palatable and wholesome. We could not learn to what species of plant it belonged, having never been able to procure the leaves; but it was supposed, by our botanists, to be the root of some kind of fern.

Agreably

Agreeably to the practice of Captain Cook, I shall subjoin an abstract of the astronomical observations which were made at the observatory in Karakakooa Bay, for determining its latitude and longitude, and for finding the rate and error of the time-keeper. To these are subjoined the mean variation of the compass, the dip of the magnetic needle, and a table of the latitude and longitude of the Sandwich Islands.

1779.
March.

The latitude of the observatory, deduced from meridian zenith distances of the sun, eleven stars to the South, and four stars to the North of the zenith $19^{\circ} 28' 0''$ North.

The longitude of the observatory, deduced from 253 sets of lunar observations; each set consisting of six observed distances of the sun from the moon, or stars; 14 of the above sets were only taken at the observatory, 105 sets being taken whilst cruising off Owhyhee; and 134 sets, when at Atooi and Oneeheow; all these being reduced to the observatory, by means of the time-keeper - - $204^{\circ} 0' 0''$ East.

The longitude of the observatory, by the time-keeper, on the 19th January 1779, according to its rate, as found at Greenwich - - - $214^{\circ} 7' 15''$ East.

The longitude of the observatory, by the time-keeper, on the 19th January 1779, according to its rate, corrected at different places, and last at Samganoodha Harbour, in Oonalaschka - $203^{\circ} 37' 22''$ East.

1779.
March.

The daily rate of the time-keeper losing on mean time, was $9''$, 6; and on the 2d February 1779, it was 14^h $41'$ $1''$, slow for mean time.

The variation of the compass, by azimuths observed on shore, with four different compasses - - 8° $6'$ $0''$ East.

The variation of the compass, by azimuths, observed on board the Resolution, with four different compasses - 7° $32'$ $0''$ East.

Dip of the North pole of the magnetic needle on shore, with $\left\{ \begin{array}{l} \text{Balanced needle} \\ \text{Unbalanced or} \\ \text{plain needle} \end{array} \right\} \begin{array}{l} 40^\circ 22' 30'' \\ 40^\circ 41' 15'' \end{array}$

Dip of the North pole of the magnetic needle on board, with $\left\{ \begin{array}{l} \text{Balanced needle} \\ \text{Unbalanced needle} \end{array} \right\} \begin{array}{l} 41^\circ 50' 0'' \\ 40^\circ 30' 45'' \end{array}$

A Table of the Latitude and Longitude of the Sandwich Islands.

			Latitude.	Longitude.
Owhyhee	{	The North point - -	$20^\circ 17'$	$204^\circ 2'$
		South point - -	$18^\circ 54'$	$204^\circ 15'$
		East point - -	$19^\circ 34'$	$205^\circ 6'$
		Karakakooa Bay - -	$19^\circ 28'$	$204^\circ 0'$
Mowee	{	East point - -	$20^\circ 50'$	$204^\circ 4'$
		South point - -	$20^\circ 34'$	$203^\circ 48'$
		West point - -	$20^\circ 54'$	$203^\circ 24'$
Morokinnee	-	-	$20^\circ 39'$	$203^\circ 33'$
Tahoorowa	-	-	$20^\circ 38'$	$203^\circ 27'$
Ranai. South point	-	-	$20^\circ 46''$	$203^\circ 8'$
Morotoi. West point	-	-	$21^\circ 10'$	$202^\circ 46'$
Woahoo.				

THE PACIFIC OCEAN.

123

			Latitude.	Longitude.	
Woahoo.	Anchoring-place	-	21° 43'	202° 9'	1779. March.
Atooi.	Wymoa Bay	-	21° 57'	200° 20'	
Oreeheow.	Anchoring-place	-	21° 50'	199° 45'	
Oreehoua	-	-	22° 2'	199° 52'	
Tahoora	-	-	21° 43'	199° 36'	

C H A P. VII.

General Account of the Sandwich Islands continued.—Of the Inhabitants.—Their Origin.—Persons.—Pernicious Effects of the Ava.—Numbers.—Disposition and Manners.—Reasons for supposing them not Cannibals.—Dress and Ornaments.—Villages and Houses.—Food.—Occupations and Amusements.—Addicted to Gaming.—Their extraordinary Dexterity in Swimming.—Arts and Manufactures.—Curious Specimens of their Sculpture.—Kipparee, or Method of painting Cloth.—Mats.—Fishing Hooks.—Cordage.—Salt Pans.—Warlike Instruments.

1779.
March.

THE inhabitants of the Sandwich Islands are undoubtedly of the same race with those of New Zealand, the Society and Friendly Islands, Easter Island, and the Marquesas; a race that possesses, without any intermixture, all the known lands between the latitudes of 47° South, and 20° North, and between the longitudes of 184° and 260° East. This fact, which, extraordinary as it is, might be thought sufficiently proved by the striking similarity of their manners and customs, and the general resemblance of their persons, is established, beyond all controversy, by the absolute identity of their language.

From what continent they originally emigrated, and by what steps they have spread through so vast a space, those who are curious in disquisitions of this nature, may per-
haps

1779.
March.

haps not find it very difficult to conjecture. It has been already observed, that they bear strong marks of affinity to some of the Indian tribes, that inhabit the Ladrões and Caroline Islands; and the same affinity may again be traced amongst the Battas and the Malays. When these events happened, is not so easy to ascertain; it was probably not very lately, as they are extremely populous, and have no tradition of their own origin, but what is perfectly fabulous; whilst, on the other hand, the unadulterated state of their general language, and the simplicity which still prevails in their customs and manners, seem to indicate, that it could not have been at any very distant period.

The natives of these islands are, in general, above the middle size, and well made; they walk very gracefully, run nimbly, and are capable of bearing great fatigue; though, upon the whole, the men are somewhat inferior, in point of strength and activity, to the Friendly islanders, and the women less delicately limbed than those of Otaheite. Their complexion is rather darker than that of the Otaheiteans, and they are not altogether so handsome a people *. However, many of both sexes had fine open countenances; and the women, in particular, had good eyes and teeth, and a sweetness and sensibility of look, which rendered them very engaging. Their hair is of a brownish black, and neither uniformly straight, like that of the Indians of America, nor uniformly curling, as amongst the African negroes, but varying, in this respect, like the hair of Europeans. One striking peculiarity, in the features of every part of this great nation, I do not remember to have seen any

* The annexed print of *a man of Sandwich Islands*, was taken from a portrait of our friend Kancena,

where

1779.
March.

where mentioned; which is, that, even in the handsomest faces, there is always a fulness of the nostril, without any flatness or spreading of the nose, that distinguishes them from Europeans. It is not improbable that this may be the effect of their usual mode of salutation, which is performed by pressing the ends of their noses together.

The same superiority that is observable in the persons of the *Erees*, through all the other islands, is found also here. Those whom we saw were, without exception, perfectly well formed; whereas the lower sort, besides their general inferiority, are subject to all the variety of make and figure that is seen in the populace of other countries. Instances of deformity are more frequent here, than in any of the other islands. Whilst we were cruising off Owhyhee, two dwarfs came on board, one an old man, four feet two inches high, but exactly proportioned, and the other a woman, nearly of the same height. We afterward saw three natives, who were hump-backed, and a young man, born without hands or feet. Squinting is also very common amongst them; and a man, who, they said, had been born blind, was brought to us to be cured. Besides these particular imperfections, they are, in general, very subject to boils and ulcers, which we attributed to the great quantity of salt they eat with their flesh and fish. The *Erees* are very free from these complaints; but many of them suffer still more dreadful effects from the immoderate use of the *ava*. Those who were the most affected by it, had their bodies covered with a white scurf, their eyes red and inflamed, their limbs emaciated, the whole frame trembling and paralytic, accompanied with a disability to raise the head. Though this drug does not appear universally to shorten life, as was
evident

evident from the cases of Terreeoboo, Kaoo, and some other Chiefs, who were very old men; yet it invariably brings on an early and decrepid old age. It is fortunate, that the use of it is made one of the peculiar privileges of the Chiefs. The young son of Terreeoboo, who was about twelve years old, used to boast of his being admitted to drink *ava*, and shewed us, with great triumph, a small spot in his side that was growing scaly.

1779.
March.

There is something very singular in the history of this pernicious drug. When Captain Cook first visited the Society Islands, it was very little known among them. On his second voyage, he found the use of it very prevalent at Ulitea; but it had still gained very little ground at Otaheite. When we were last there, the dreadful havock it had made was beyond belief, insomuch that the Captain scarce knew many of his old acquaintances. At the Friendly Islands, it is also constantly drunk by the Chiefs, but so much diluted with water, that it does not appear to produce any bad effects. At Atooi, also, it is used with great moderation, and the Chiefs are, in consequence, a much finer set of men there, than in any of the neighbouring islands. We remarked, that, by discontinuing the use of this root, the noxious effects of it soon wore off. Our good friends, Kaireekaea and old Kaoo, were persuaded by us to refrain from it; and they recovered amazingly during the short time we afterward remained in the island.

It may be thought extremely difficult to form any probable conjectures respecting the population of islands, with many parts of which we are but imperfectly acquainted.

1779.
March.

quainted. There are, however, two circumstances, that take away much of this objection; the first is, that the interior parts of the country are entirely uninhabited; so that, if the number of the inhabitants along the coast be known, the whole will be pretty accurately determined. The other is, that there are no towns of any considerable size, the habitations of the natives being pretty equally dispersed in small villages round all their coasts. It is on this ground that I shall venture at a rough calculation of the number of persons in this group of islands.

The bay of Karakakooa, in Owhyhee, is three miles in extent, and contains four villages of about eighty houses each; upon an average, in all three hundred and twenty; besides a number of straggling houses; which may make the whole amount to three hundred and fifty. From the frequent opportunities I had of informing myself on this head, I am convinced, that six persons to a house is a very moderate allowance; so that, on this calculation, the country about the bay contains two thousand one hundred souls. To these may be added fifty families, or three hundred persons, which I conceive to be nearly the number employed in the interior parts of the country amongst their plantations; making in all two thousand four hundred. If, therefore, this number be applied to the whole extent of coast round the island, deducting a quarter for the uninhabited parts, it will be found to contain one hundred and fifty thousand. By the same mode of calculation, the rest of the islands will be found to contain the following numbers:

-Owhyhee,

Owhyhee,	-	-	-	150,000
Mowee,	-	-	-	65,400
Woahoo,	-	-	-	60,200
Atooi,	-	-	-	54,000
Morotoi,	-	-	-	36,000
Oneeheow,	-	-	-	10,000
Ranai,	-	-	-	20,400
Oreehoua,	-	-	-	4,000
Total of inhabitants,				400,000

1779.
March.

I am pretty confident, that, in this calculation, I have not exceeded the truth in the total amount. If we compare the numbers supposed to be in Owhyhee, with the population of Otaheite, as settled by Dr. Forster, this computation will be found very low. The proportion of coast, in the latter island, is, to that of Owhyhee, only as one to three: the number of inhabitants in Otaheite he states to be one hundred and twenty-one thousand five hundred; though, according to his own principles, it should be double that amount. Again, if we compare it with the medium population of the countries in Europe, the proportion will be in favour of the latter nearly as two to one.

Notwithstanding the irreparable loss we suffered from the sudden resentment and violence of these people, yet, in justice to their general conduct, it must be acknowledged, that they are of the most mild and affectionate disposition; equally remote from the extreme levity and fickleness of the Otaheiteans, and the distant gravity and reserve of the inhabitants of the Friendly Islands. They appear to live in the utmost harmony and friendship with one another. The women, who had children, were remarkable for their tender and constant attention to them; and the men would often

1779.
March.

lend their assistance in those domestic offices, with a willingness that does credit to their feelings.

It must, however, be observed, that they fall very short of the other islanders, in that best test of civilization, the respect paid to the women. Here they are not only deprived of the privilege of eating with the men, but the best sorts of food are *tabooed*, or forbidden them. They are not allowed to eat pork, turtle, several kinds of fish, and some species of the plantains; and we were told that a poor girl got a terrible beating, for having eaten, on board our ship, one of these interdicted articles. In their domestic life, they appear to live almost entirely by themselves, and though we did not observe any instances of personal ill-treatment, yet it was evident they had little regard or attention paid them.

The great hospitality and kindness, with which we were received by them, have been already frequently remarked; and indeed they make the principal part of our transactions with them. Whenever we came on shore, there was a constant struggle who should be most forward in making us little presents, bringing refreshments, or shewing some other mark of their respect. The old people never failed of receiving us with tears of joy; seemed highly gratified with being allowed to touch us, and were constantly making comparisons between themselves and us, with the strongest marks of humility. The young women were not less kind and engaging, and, till they found, notwithstanding our utmost endeavours to prevent it, that they had reason to repent of our acquaintance, attached themselves to us without the least reserve.

In justice, however, to the sex, it must be observed, that these ladies were probably all of the lower class of the people;

1779.
March.

people; for I am strongly inclined to believe, that, excepting the few, whose names are mentioned in the course of our narrative, we did not see any woman of rank during our stay amongst them.

Their natural capacity seems, in no respect, below the common standard of mankind. Their improvements in agriculture, and the perfection of their manufactures, are certainly adequate to the circumstances of their situation, and the natural advantages they enjoy. The eager curiosity, with which they attended the armourer's forge, and the many expedients they had invented, even before we left the islands, for working the iron they had procured from us, into such forms as were best adapted to their purposes, were strong proofs of docility and ingenuity.

Our unfortunate friend, Kaneena, possessed a degree of judicious curiosity, and a quickness of conception, which was rarely met with amongst these people. He was very inquisitive after our customs and manners; asked after our King; the nature of our government; our numbers; the method of building our ships; our houses; the produce of our country; whether we had wars; with whom; and on what occasions; and in what manner they were carried on; who was our God; and many other questions of the same nature, which indicated an understanding of great comprehension.

We met with two instances of persons disordered in their minds, the one a man at Owhyhee, the other a woman at Oneeheow. It appeared, from the particular attention and respect paid to them, that the opinion of their being inspired by the Divinity, which obtains among most of the nations of the East, is also received here.

1779.
March.

Though the custom, of eating the bodies of their enemies, be not known, by positive evidence, to exist in any of the South Sea Islands, except New Zealand, yet it is extremely probable, that it was originally prevalent in them all. The sacrificing human victims, which seems evidently to be a relick of this horrid practice, still obtains universally amongst these islanders; and it is easy to conceive, why the New Zealanders should retain the repast, which was probably the last act of these shocking rites, longer than the rest of their tribe, who were situated in more mild and fruitful climates. As the inhabitants of the Sandwich Islands certainly bear a nearer resemblance to those of New Zealand, both in their persons and disposition, than to any other people of this family, so it was strongly suspected, by Mr. Anderson, that, like them, they still continue to feast on human flesh. The evidence, on which he founds this opinion, has been stated very fully in the tenth chapter of the third book*; but, as I always entertained great doubts of the justice of his conclusions, it may not be improper to take this occasion of mentioning the grounds on which I venture to differ from him. With respect to the information derived from the natives themselves, I shall only observe, that great pains were taken, by almost every officer on board, to come at the knowledge of so curious a circumstance; and that, except in the two instances mentioned by Mr. Anderson, we found them invariably denying the existence of any such custom amongst them. It must be allowed, that Mr. Anderson's knowledge of their language, which was superior to that of any other person in either ship, ought certainly to give his opinion great weight; at the same time, I must beg leave to

* See Vol. II. p. 209, 210—214.

remark,

1779.
March.

remark, that, being present when he examined the man who had the small piece of salted flesh wrapped in cloth, it struck me very forcibly, that the signs he made use of meant nothing more, than that it was intended to be eat, and that it was very pleasant or wholesome to the stomach. In this opinion I was confirmed, by a circumstance which came to our knowledge, after the death of my worthy and ingenious friend, *viz.* that almost every native of these islands carried about with him, either in his calibash, or wrapped up in a piece of cloth, and tied about his waist, a small piece of raw pork, highly salted, which they considered as a great delicacy, and used now and then to taste of. With respect to the confusion the young lad was in (for he was not more than sixteen or eighteen years of age), no one could have been surprized at it, who had seen the eager and earnest manner in which Mr. Anderson questioned him:

The argument drawn from the instrument made with shark's teeth, and which is nearly of the same form with those used at New Zealand for cutting up the bodies of their enemies, is much more difficult to controvert. I believe it to be an undoubted fact, that this knife, if it may be so called, is never used by them in cutting the flesh of other animals. However, as the custom of offering human sacrifices, and of burning the bodies of the slain, is still prevalent here, it is not improbable, that the use of this instrument is retained in those ceremonies. Upon the whole, I am strongly inclined to think, and particularly from this last circumstance, that the horrid practice, in question, has but lately ceased amongst these and other islands of the South Sea. Omai, when pressed on this subject, confessed, that, in the rage and fury of revenge, they would sometimes tear the flesh of their enemies, that were slain, with their teeth;

1779.
March.

but positively denied that they ever eat it. This was certainly approaching as near the fact as could be; but, on the other hand, the denial is a strong proof that the practice has actually ceased; since in New Zealand, where it still exists, the inhabitants never made the smallest scruple of confessing it.

The inhabitants of these islands differ from those of the Friendly Isles, in suffering, almost universally, their beards to grow. There were, indeed, a few, amongst whom was the old king, that cut it off entirely; and others that wore it only upon the upper lip. The same variety, in the manner of wearing the hair, is also observable here, as among the other islanders of the South Sea; besides which, they have a fashion, as far as we know, peculiar to themselves. They cut it close on each side the head, down to the ears, leaving a ridge, of about a small hand's breadth, running from the forehead to the neck; which, when the hair is thick and curling, has the form of the crest of the ancient helmet. Others wear large quantities of false hair, flowing down their backs in long ringlets, like the figure of the inhabitants of Horn Island, as seen in Dalrymple's Voyages; and others, again, tie it into a single round bunch on the top of the head, almost as large as the head itself; and some into five or six distinct bunches. They daub their hair with a grey clay, mixed with powdered shells, which they keep in balls, and chew into a kind of soft paste, when they have occasion to make use of it. This keeps the hair smooth; and, in time, changes it to a pale yellow colour.

Both sexes wear necklaces, made of strings of small variegated shells; and an ornament, in the form of the handle
of

of a cup, about two inches long, and half an inch broad, made of wood, stone, or ivory, finely polished, which is hung about the neck, by fine threads of twisted hair, doubled sometimes an hundred fold. Instead of this ornament, some of them wear, on their breast, a small human figure, made of bone, suspended in the same manner.

1779.
March.

The fan, or fly-flap, is also an ornament used by both sexes. The most ordinary kind are made of the fibres of the cocoa-nut, tied loose, in bunches, to the top of a smooth polished handle. The tail-feathers of the cock, and of the tropic-bird, are also used in the same manner; but the most valuable are those which have the handle made of the arm or leg bones of an enemy slain in battle, and which are preserved with great care, and handed down, from father to son, as trophies of inestimable value.

The custom of *tattooing* the body, they have in common with the rest of the natives of the South Sea Islands; but it is only at New Zealand, and the Sandwich Islands, that they *tattoo* the face. There is also this difference between the two last, that, in the former, it is done in elegant spiral volutes, and in the latter, in straight lines, crossing each other at right angles. The hands and arms of the women are also very neatly marked, and they have a singular custom amongst them, the meaning of which we could never learn, that of *tattooing* the tip of the tongues of the females.

From some information we received, relative to the custom of *tattooing*, we were inclined to think, that it is frequently intended as a sign of mourning on the death of a Chief, or any other calamitous event. For we were often told, that

1779.
March.

such a particular mark was in memory of such a Chief; and so of the rest. It may be here, too, observed, that the lowest class are often *tattooed* with a mark, that distinguishes them as the property of the several Chiefs to whom they belong.

The dress of the men generally consists only of a piece of thick cloth called the *maro*, about ten or twelve inches broad, which they pass between the legs, and tie round the waist. This is the common dress of all ranks of people. Their mats, some of which are beautifully manufactured, are of various sizes, but mostly about five feet long, and four broad. These they throw over their shoulders, and bring forward before; but they are seldom used, except in time of war, for which purpose they seem better adapted than for ordinary use, being of a thick and cumbersome texture, and capable of breaking the blow of a stone, or any blunt weapon. Their feet are generally bare, except when they have occasion to travel over the burnt stones, when they secure them with a sort of sandal, made of cords, twisted from the fibres of the cocoa-nut. Such is the ordinary dress of these islanders; but they have another, appropriated to their Chiefs, and used on ceremonious occasions, consisting of a feathered cloak and helmet, which, in point of beauty and magnificence, is perhaps nearly equal to that of any nation in the world. As this dress has been already described with great accuracy and minuteness, I have only to add, that these cloaks are made of different lengths, in proportion to the rank of the wearer, some of them reaching no lower than the middle, others trailing on the ground. The inferior Chiefs have also a short cloak, resembling the former, made of the long tail-feathers of the cock, the tropic and man of war birds, with a broad border of the small red and yellow

yellow feathers, and a collar of the same. Others again are made of feathers entirely white, with variegated borders. The helmet has a strong lining of wicker-work, capable of breaking the blow of any warlike instrument, and seems evidently designed for that purpose.

1779.
March.

These feathered dresses seemed to be exceedingly scarce, appropriated to persons of the highest rank, and worn by the men only. During the whole time we lay in Karakakooa Bay, we never saw them used but on three occasions; in the curious ceremony of Terreeoboo's first visit to the ships; by some Chiefs, who were seen among the crowd on shore, when Captain Cook was killed; and, afterward, when Eappo brought his bones to us.

The exact resemblance between this habit, and the cloak and helmet formerly worn by the Spaniards, was too striking not to excite our curiosity to inquire, whether there were any probable grounds for supposing it to have been borrowed from them. After exerting every means in our power, of obtaining information on this subject, we found that they had no immediate knowledge of any other nation whatever; nor any tradition remaining among them of these islands having been ever visited before by such ships as ours. But notwithstanding the result of these inquiries, the uncommon form of this habit appears to me a sufficient proof of its European origin; especially when added to another circumstance, that it is a singular deviation from the general resemblance in dress, which prevails amongst all the branches of this tribe, dispersed through the South Sea. We were driven indeed, by this conclusion, to a supposition of the shipwreck of some Buccaneer, or Spanish ship, in the neighbourhood of these islands. But when it is recol-

1779.
March.

lected, that the course of the Spanish trade from Acapulco to the Manillas, is but a few degrees to the Southward of the Sandwich Islands, in their passage out, and to the Northward, on their return, this supposition will not appear in the least improbable.

The common dress of the women bears a close resemblance to that of the men. They wrap round the waist a piece of cloth, that reaches half way down the thighs; and sometimes, in the cool of the evening, they appeared with loose pieces of fine cloth thrown over their shoulders, like the women of Otaheite. The *pau* is another dress very frequently worn by the younger part of the sex. It is made of the thinnest and finest sort of cloth, wrapt several times round the waist, and descending to the leg; so as to have exactly the appearance of a full short petticoat. Their hair is cut short behind, and turned up before, as is the fashion among the Otaheiteans and New Zealanders; all of whom differ, in this respect, from the women of the Friendly Islands, who wear their hair long. We saw, indeed, one woman in Karakakooa Bay, whose hair was arranged in a very singular manner; it was turned up behind, and brought over the forehead, and then doubled back, so as to form a sort of shade to the face, like a small bonnet.

Their necklaces are made of shells, or of a hard, shining, red berry. Besides which, they wear wreaths of dried flowers of the Indian mallow; and another beautiful ornament, called *eraie*, which is generally put about the neck, but is sometimes tied like a garland round the hair, and sometimes worn in both these ways at once, as may be seen in the print of the *woman of the Sandwich Islands*. It is a ruff of the thickness of a finger, made, in a curious manner, of exceedingly
small

small feathers, woven so close together as to form a surface as smooth as that of the richest velvet. The ground was generally of a red colour, with alternate circles of green, yellow, and black. Their bracelets, which were also of great variety, and very peculiar kinds, have been already described.

1779.
March.

At Atooi, some of the women wore little figures of the turtle, neatly formed of wood or ivory, tied on their fingers in the manner we wear rings. Why this animal is thus particularly distinguished, I leave to the conjectures of the curious. There is also an ornament made of shells, fastened in rows on a ground of strong netting, so as to strike each other, when in motion; which both men and women, when they dance, tie either round the arm or the ankle, or below the knee. Instead of shells, they sometimes make use of dogs teeth, and a hard red berry, resembling that of the holly.

There remains to be mentioned another ornament (if such it may be called), the figure of which may be better conceived from the annexed print, than any written description. It is a kind of mask, made of a large gourd, with holes cut in it for the eyes and nose. The top was stuck full of small green twigs, which, at a distance, had the appearance of an elegant waving plume; and from the lower part hung narrow stripes of cloth, resembling a beard. We never saw these masks worn but twice, and both times by a number of people together in a canoe, who came to the side of the ship, laughing and drolling, with an air of masquerading. Whether they may not likewise be used as a defence for the head against stones, for which they seem best designed, or in some of their public games, or be merely intended

1779.
March.

tended for the purposes of mummery, we could never inform ourselves.

It has already been remarked, in a few instances, that the natives of the Sandwich Islands approach nearer to the New Zealanders, in their manners and customs, than to either of their less distant neighbours of the Society or Friendly Islands. This is in nothing more observable, than in their method of living together in small towns or villages, containing from about one hundred to two hundred houses, built pretty close together, without any order, and having a winding path leading through them. They are generally flanked, toward the sea, with loose detached walls, which probably are meant both for the purposes of shelter and defence. The figure of their houses has been already described. They are of different sizes, from eighteen feet by twelve, to forty-five by twenty-four. There are some of a larger kind; being fifty feet long and thirty broad, and quite open at one end. These, they told us, were designed for travellers or strangers, who were only making a short stay.

In addition to the furniture of their houses, which has been accurately described by Captain Cook, I have only to add, that at one end are mats on which they sleep, with wooden pillows, or sleeping stools, exactly like those of the Chinese. Some of the better sort of houses have a courtyard before them, neatly railed in, with smaller houses built round it, for their servants. In this *area* they generally eat, and sit during the day-time. In the sides of the hills, and among the steep rocks, we also observed several holes or caves, which appeared to be inhabited; but as the entrance was defended with wicker-work, and we also found, in the
only

only one that was visited, a stone fence running across it within, we imagine they are principally designed for places of retreat, in case of an attack from an enemy.

1779.
March.

The food of the lower class of people consists principally of fish, and vegetables; such as yams, sweet-potatoes, tar-row, plantains, sugar-canes, and bread-fruit. To these, the people of a higher rank add the flesh of hogs and dogs, dressed in the same manner as at the Society Islands. They also eat fowls of the same domestic kind with ours; but they are neither plentiful, nor much esteemed by them. It is remarked by Captain Cook, that the bread-fruit and yams appeared scarce amongst them, and were reckoned great rarities. We found this not to be the case on our second visit; and it is therefore most probable, that, as these vegetables were generally planted in the interior parts of the country, the natives had not had time to bring them down to us, during the short stay we made in Wymoa Bay. Their fish they salt, and preserve in gourd-shells; not, as we at first imagined, for the purpose of providing against any temporary scarcity, but from the preference they give to salted meats. For we also found, that the *Erees* used to pickle pieces of pork in the same manner, and esteemed it a great delicacy.

Their cookery is exactly of the same sort with that already described, in the accounts that have been published of the other South Sea islands; and though Captain Cook complains of the sourness of their tarrow puddings, yet, in justice to the many excellent meals they afforded us in Karakakooa Bay, I must be permitted to rescue them from this general censure, and to declare, that I never eat better even in the Friendly Islands. It is however remarkable, that they had

not

1779.
March.

not got the art of preserving the bread-fruit, and making the four paste of it called *Maihee*, as at the Society Islands ; and it was some satisfaction to us, in return for their great kindness and hospitality, to have it in our power to teach them this useful secret. They are exceedingly cleanly at their meals ; and their mode of dressing both their animal and vegetable food, was universally allowed to be greatly superior to ours. The Chiefs constantly begin their meal with a doze of the extract of pepper-root, brewed after the usual manner. The women eat apart from the men, and are *ta-bood*, or forbidden, as has been already mentioned, the use of pork, turtle, and particular kinds of plantains. However, they would eat pork with us in private ; but we could never prevail upon them to touch the two last articles.

The way of spending their time appears to be very simple, and to admit of little variety. They rise with the sun ; and, after enjoying the cool of the evening, retire to rest a few hours after sun-set. The making of canoes and mats forms the occupations of the *Erees* ; the women are employed in manufacturing cloth ; and the *Towtows* are principally engaged in the plantations and fishing. Their idle hours are filled up with various amusements. Their young men and women are fond of dancing ; and, on more solemn occasions, they have boxing and wrestling matches, after the manner of the Friendly Islands ; though, in all these respects, they are much inferior to the latter.

Their dances have a much nearer resemblance to those of the New Zealanders, than of the Otaheiteans or Friendly Islanders. They are prefaced with a slow, solemn song, in which all the party join, moving their legs, and gently striking their breasts, in a manner, and with attitudes, that are perfectly

1799.
March.

perfectly easy and graceful; and so far they are the same with the dances of the Society Islands. When this has lasted about ten minutes, both the tune and the motions gradually quicken, and end only by their inability to support the fatigue; which part of the performance is the exact counter-part of that of the New Zealanders; and (as it is among them) the person who uses the most violent action, and holds out the longest, is applauded as the best dancer. It is to be observed, that, in this dance, the women only take a part, and that the dancing of the men is nearly of the same kind with what we saw of the small parties at the Friendly Islands; and which may, perhaps, with more propriety, be called the accompaniment of songs, with corresponding and graceful motions of the whole body. Yet as we were spectators of boxing exhibitions, of the same kind with those we were entertained with at the Friendly Islands, it is probable that they had likewise their grand ceremonious dances, in which numbers of both sexes assisted.

Their music is also of a ruder kind, having neither flutes nor reeds, nor instruments of any other sort, that we saw, except drums of various sizes. But their songs, which they sung in parts *, and accompany with a gentle motion of the arms,

* As this circumstance, of their *singing in parts*, has been much doubted by persons eminently skilled in music, and would be exceedingly curious if it was clearly ascertained, it is to be lamented that it cannot be more positively authenticated.

Captain Burney, and Captain Phillips of the Marines, who both have a tolerable knowledge of music, have given it as their opinion, that they did sing in parts; that is to say, that they sung together in different notes, which formed a pleasing harmony.

These gentlemen have fully testified, that the Friendly Islanders undoubtedly studied their performances before they were exhibited in public; that they had an idea of different notes being useful in harmony; and also, that they rehearsed their

1779.
March.

arms, in the same manner as the Friendly Islanders, had a very pleasing effect.

It is very remarkable, that the people of these islands are great gamblers. They have a game very much like our draughts; but, if one may judge from the number of squares, it is much more intricate. The board is about two feet long, and is divided into two hundred and thirty-eight squares, of which there are fourteen in a row, and they

their compositions in private, and threw out the inferior voices, before they ventured to appear before those who were supposed to be judges of their skill in music.

In their regular concerts, each man had a bamboo, which was of a different length, and gave a different tone: these they beat against the ground, and each performer, assisted by the note given by this instrument, repeated the same note, accompanying it by words, by which means it was rendered sometimes short, and sometimes long. In this manner, they sung in chorus, and not only produced octaves to each other, according to their different species of voice, but fell on concords, such as were not disagreeable to the ear.

Now, to overturn this fact, by the reasoning of persons who did not hear these performances, is rather an arduous task. And, yet, there is great improbability that any uncivilized people should, by accident, arrive at this degree of perfection in the art of music, which we imagine can only be attained by dint of study, and knowledge of the system and theory upon which musical composition is founded. Such miserable jargon as our country Psalm-fingers practise, which may be justly deemed the lowest class of counterpoint, or singing in several parts, cannot be acquired in the coarse manner in which it is performed in the churches, without considerable time and practice. It is, therefore, scarcely credible, that a people, semi-barbarous, should naturally arrive at any perfection in that art, which it is much doubted whether the Greeks and Romans, with all their refinements in music, ever attained, and which the Chinese, who have been longer civilized than any people on the globe, have not yet found out.

If Captain Burney (who, by the testimony of his father, perhaps the greatest musical theorist of this or any other age, was able to have done it) had written down, in European notes, the concords that these people sung; and if these concords had been such as European ears could tolerate, there would have been no longer doubt of the fact: but, as it is, it would, in my opinion, be a rash judgment to venture to affirm that they did or did not understand counterpoint; and therefore I fear that this curious matter must be considered as still remaining undecided.

make use of black and white pebbles, which they move from square to square.

1779.
March.

There is another game, which consists in hiding a stone under a piece of cloth, which one of the parties spreads out, and rumples in such a manner, that the place where the stone lies is difficult to be distinguished. The antagonist, with a stick, then strikes the part of the cloth where he imagines the stone to be; and as the chances are, upon the whole, considerably against his hitting it, odds, of all degrees, varying with the opinion of the skill of the parties, are laid on the side of him who hides.

Besides these games, they frequently amuse themselves with racing-matches between the boys and girls; and here again they wager with great spirit. I saw a man in a most violent rage, tearing his hair, and beating his breast, after losing three hatchets at one of these races, which he had just before purchased from us, with half his substance.

Swimming is not only a necessary art, in which both their men and women are more expert than any people we had hitherto seen, but a favourite diversion amongst them. One particular mode, in which they sometimes amused themselves with this exercise, in Karakakooa Bay, appeared to us most perilous and extraordinary, and well deserving a distinct relation.

The surf, which breaks on the coast round the bay, extends to the distance of about one hundred and fifty yards from the shore, within which space, the surges of the sea, accumulating from the shallowness of the water, are dashed against the beach with prodigious violence. Whenever, from stormy weather, or any extraordinary swell at sea, the impetuosity of the surf is increased to its utmost height, they

1779.
March.

choose that time for this amusement, which is performed in the following manner: Twenty or thirty of the natives, taking each a long narrow board, rounded at the ends, set out together from the shore. The first wave they meet, they plunge under, and suffering it to roll over them, rise again beyond it, and make the best of their way, by swimming, out into the sea. The second wave is encountered in the same manner with the first; the great difficulty consisting in seizing the proper moment of diving under it, which, if missed, the person is caught by the surf, and driven back again with great violence; and all his dexterity is then required to prevent himself from being dashed against the rocks. As soon as they have gained, by these repeated efforts, the smooth water beyond the surf, they lay themselves at length on their board, and prepare for their return. As the surf consists of a number of waves, of which every third is remarked to be always much larger than the others, and to flow higher on the shore, the rest breaking in the intermediate space, their first object is to place themselves on the summit of the largest surge, by which they are driven along with amazing rapidity toward the shore. If by mistake they should place themselves on one of the smaller waves, which breaks before they reach the land, or should not be able to keep their plank in a proper direction on the top of the swell, they are left exposed to the fury of the next, and, to avoid it, are obliged again to dive and regain the place, from which they set out. Those who succeed in their object of reaching the shore, have still the greatest danger to encounter. The coast being guarded by a chain of rocks, with, here and there, a small opening between them, they are obliged to steer their board through one of these, or, in case of failure, to quit it, before they reach the

rocks,

1779.
March.

rocks, and, plunging under the wave, make the best of their way back again. This is reckoned very disgraceful, and is also attended with the loss of the board, which I have often seen, with great terror, dashed to pieces, at the very moment the islander quitted it. The boldness and address, with which we saw them perform these difficult and dangerous manœuvres, was altogether astonishing, and is scarcely to be credited *.

An accident, of which I was a near spectator, shews at how early a period they are so far familiarized to the water, as both to lose all fears of it, and to set its dangers at defiance. A canoe being overfet, in which was a woman with her children, one of them an infant, who, I am convinced, was not more than four years old, seemed highly delighted with what had happened, swimming about at its ease, and playing a hundred tricks, till the canoe was put to rights again.

Besides the amusements I have already mentioned, the young children have one, which was much played at, and shewed no small degree of dexterity. They take a short stick, with a peg sharpened at both ends, running through one extremity of it, and extending about an inch on each side; and throwing up a ball made of green leaves moulded together, and secured with twine, they catch it on the point of the peg; and immediately throwing it up again from the peg, they turn the stick round, and thus keep catching it on each peg alternately, without missing it, for a considerable time. They are not less expert at another game of the same nature, tossing up in the air, and catching, in their

* An amusement, somewhat similar to this, at Otaheite, has been described, Vol. II. p. 150.

1779.
March.

turns, a number of these balls ; so that we frequently saw little children thus keep in motion five at a time. With this latter play the young people likewise divert themselves at the Friendly Islands.

The great resemblance which prevails in the mode of agriculture and navigation, amongst all the inhabitants of the South Sea islands, leaves me very little to add on those heads. Captain Cook has already described the figure of the canoes we saw at Atooi. Those of the other islands were precisely the same ; and the largest we saw was a double canoe belonging to Terreeoboo, which measured seventy feet in length, three and a half in depth, and twelve in breadth ; and each was hollowed out of one tree.

The progress they have made in sculpture, their skill in painting cloth, and their manufacturing of mats, have been all particularly described. The most curious specimens of the former, which we saw during our second visit, are the bowls, in which the Chiefs drink *ava*. These are usually about eight or ten inches in diameter, perfectly round, and beautifully polished. They are supported by three, and sometimes four small human figures, in various attitudes. Some of them rest on the hands of their supporters, extended over the head ; others on the head and hands ; and some on the shoulders. The figures, I am told, are accurately proportioned, and neatly finished, and even the anatomy of the muscles, in supporting the weight, well expressed.

Their cloth is made of the same materials, and in the same manner, as at the Friendly and Society Islands. That which is designed to be painted, is of a thick and strong texture, several folds being beat and incorporated together ;

I

after

1779.
March.

after which it is cut in breadths, about two or three feet wide, and is painted in a variety of patterns, with a comprehensiveness and regularity of design, that bespeaks infinite taste and fancy. The exactness with which the most intricate patterns are continued, is the more surprizing, when we consider, that they have no stamps, and that the whole is done by the eye, with pieces of bamboo cane dipped in paint; the hand being supported by another piece of the cane, in the manner practised by our painters. Their colours are extracted from the same berries, and other vegetable substances, as at Otaheite, which have been already described by former voyagers.

The business of painting belongs entirely to the women, and is called *kipparae*; and it is remarkable, that they always gave the same name to our writing. The young women would often take the pen out of our hands, and shew us, that they knew the use of it as well as we did; at the same time telling us, that our pens were not so good as theirs. They looked upon a sheet of written paper, as a piece of cloth striped after the fashion of our country, and it was not without the utmost difficulty, that we could make them understand, that our figures had a meaning in them which theirs had not.

Their mats are made of the leaves of the *pandanus*; and, as well as their cloths, are beautifully worked in a variety of patterns, and stained of different colours. Some have a ground of pale green, spotted with squares, or romboids, of red; others are of a straw colour, spotted with green; and others are worked with beautiful stripes, either in straight or waving lines of red and brown. In this article of manufacture, whether we regard the strength, fineness, or beauty, they certainly excel the whole world.

Their

1779.
March.

Their fishing-hooks are made of mother-of-pearl, bone, or wood, pointed and barbed with small bones, or tortoise-shell. They are of various sizes and forms; but the most common are about two or three inches long, and made in the shape of a small fish, which serves as a bait, having a bunch of feathers tied to the head or tail. Those with which they fish for sharks, are of a very large size, being generally six or eight inches long. Considering the materials of which these hooks are made, their strength and neatness are really astonishing; and in fact we found them, upon trial, much superior to our own.

The line which they use for fishing, for making nets, and for other domestic purposes, is of different degrees of fineness, and is made of the bark of the *touta*, or cloth tree, neatly and evenly twisted, in the same manner as our common twine; and may be continued to any length. They have a finer sort, made of the bark of a small shrub called *areemah*; and the finest is made of human hair; but this last is chiefly used for things of ornament. They also make cordage of a stronger kind, for the rigging of their canoes, from the fibrous coatings of the cocoa-nuts. Some of this we purchased for our own use, and found it well adapted to the smaller kinds of running rigging. They likewise make another sort of cordage, which is flat, and exceedingly strong, and used principally in lashing the roofing of their houses, or whatever they wish to fasten tight together. This last is not twisted like the former sorts, but is made of the fibrous strings of the cocoa-nut's coat, plaited with the fingers, in the manner our sailors make their points for the reefing of sails.

The gourds, which grow to so enormous a size, that some of them are capable of containing from ten to twelve gallons,

1779.
March.

lons, are applied to all manner of domestic purposes; and in order to fit them the better to their respective uses, they have the ingenuity to give them different forms, by tying bandages round them during their growth. Thus, some of them are of a long, cylindrical form, as best adapted to contain their fishing-tackle; others are of a dish form, and these serve to hold their salt, and salted provisions, their puddings, vegetables, &c.; which two sorts have neat close covers, made likewise of the gourd; others again are exactly the shape of a bottle with a long neck, and in these they keep their water. They have likewise a method of scoring them with a heated instrument, so as to give them the appearance of being painted, in a variety of neat and elegant designs.

Amongst their arts, we must not forget that of making salt, with which we were amply supplied, during our stay at these islands, and which was perfectly good of its kind. Their salt-pans are made of earth, lined with clay; being generally six or eight feet square, and about eight inches deep. They are raised upon a bank of stones near the high water mark, from whence the salt water is conducted to the foot of them, in small trenches, out of which they are filled, and the sun quickly performs the necessary process of evaporation. The salt we procured at Atooi and Oneehcow, on our first visit, was of a brown and dirty sort; but that which we afterward got in Karakakooa Bay, was white, and of a most excellent quality, and in great abundance. Besides the quantity we used in salting pork, we filled all our empty casks, amounting to sixteen puncheons, in the Resolution only.

Their instruments of war are spears; daggers, called *pa-hooas*; clubs; and flings. The spears are of two sorts, and made

1779.
March.

made of a hard solid wood, which has much the appearance of mahogany. One fort is from six to eight feet in length, finely polished, and gradually increasing in thickness from the extremity till within about half a foot of the point, which tapers suddenly, and is furnished with four or six rows of barbs. It is not improbable, that these might be used in the way of darts. The other fort, with which we saw the warriors at Owhyhee and Atooi mostly armed, are twelve or fifteen feet long, and, instead of being barbed, terminate toward the point, like their daggers.

The dagger, or *pahooa*, is made of heavy black wood, resembling ebony. Its length is from one to two feet, with a string passing through the handle, for the purpose of suspending it to the arm. For its shape, I must refer the reader to figure 6, in Plate LXVII.

The clubs are made indifferently of several sorts of wood. They are of rude workmanship, and of a variety of shapes and sizes.

The slings have nothing singular about them; and in no respect differ from our common slings, except that the stone is lodged on a piece of matting instead of leather.

C H A P. VIII.

General Account of the Sandwich Islands continued.—Government.—People divided into three Classes.—Power of Eree-taboo.—Genealogy of the Kings of Owhyhee and Mowee.—Power of the Chiefs.—State of the inferior Class.—Punishment of Crimes.—Religion.—Society of Priests.—The Orono.—Their Idols.—Songs chanted by the Chiefs, before they drink Ava.—Human Sacrifices.—Custom of knocking out the Fore-teeth.—Notions with regard to a future State.—Marriages.—Remarkable Instance of Jealousy.—Funeral Rites.

THE people of these islands are manifestly divided into three classes. The first are the *Erees*, or Chiefs, of each district; one of whom is superior to the rest, and is called at Owhyhee *Eree-taboo*, and *Eree Moe*. By the first of these words they express his absolute authority; and by the latter, that all are obliged to prostrate themselves (or put themselves to sleep, as the word signifies) in his presence. The second class are those who appear to enjoy a right of property, without authority. The third are the *towtows*, or servants, who have neither rank nor property.

It is not possible to give any thing like a systematical account of the subordination of these classes to each other, without departing from that strict veracity, which, in works of this nature, is more satisfactory than conjectures, however ingenious. I will, therefore, content myself with relating such facts, as we were witnesses to ourselves, and such

1779.
March.

accounts as we thought could be depended upon; and shall leave the reader to form, from them, his own ideas of the nature of their government.

The great power and high rank of Terreeoboo, the *Eree-taboo* of Owhyhee, was very evident, from the manner in which he was received at Karakakooa, on his first arrival. All the natives were seen prostrated at the entrance of their houses; and the canoes, for two days before, were *tabooed*, or forbidden to go out, till he took off the restraint. He was, at this time, just returned from Mowee, for the possession of which he was contending in favour of his son Teewarro, who had married the daughter and only child of the late king of that island, against Taheeteree, his surviving brother. He was attended, in this expedition, by many of his warriors; but whether their service was voluntary, or the condition on which they hold their rank and property, we could not learn.

That he collects tribute from the subordinate Chiefs, we had a very striking proof in the instance of Kaoo, which has been already related in our transactions of the 2d and 3d of February.

I have before mentioned, that the two most powerful Chiefs of these islands are Terreeoboo of Owhyhee, and Perreeorannee of Woahoo; the rest of the smaller isles being subject to one or other of these; Mowee, and its dependencies, being, at this time, claimed, as we have just observed, by Terreeoboo for Teewarro his son and intended successor; Atooi and Oncehcow being governed by the grandsons of Perreeorannee.

The following genealogy of the Owhyhee and Mowee kings, which I collected from the priests, during our residence at the *Morai* in Karakakooa Bay, contains all the in-

formation

formation I could procure relative to the political history of these islands.

1779.
March.

This account reaches to four Chiefs, predecessors of the present; all of whom they represent to have lived to an old age. Their names and successions are as follow:

First, Poorahoo Awhykaia was king of Owhyhee, and had an only son, called Neerooagooa. At this time Mowee was governed by Mokoakea; who had also an only son, named Papikaneou.

Secondly, Neerooagooa had three sons, the eldest named Kahavee; and Papikaneou, of the Mowee race, had an only son, named Kaowreeka.

Thirdly, Kahavee had an only son, Kayenewee a mummow; and Kaowreeka, the Mowee king, had two sons, Maiha maiha, and Taheeterree; the latter of whom is now, by one party, acknowledged Chief of Mowee.

Fourthly, Kayenewee a mummow had two sons, Terreeoboo and Kaihooa; and Maiha maiha, king of Mowee, had no son, but left a daughter, called Roaho.

Fifthly, Terreeoboo, the present king of Owhyhee, had a son named Teewarro, by Rora-rora, the widow of Maiha maiha, late king of Mowee; and this son has married Roaho, his half sister, in whose right he claims Mowee and its appendages.

Taheeterree, the brother of the late king, supported by a considerable party, who were not willing that the possessions should go into another family, took up arms, and opposed the rights of his niece.

When we were first off Mowee, Terreeoboo was there with his warriors to support the claims of his wife, his son, and

1779-
March.

daughter-in-law, and had fought a battle with the opposite party, in which Taheeterree was worsted. We afterward understood, that matters had been compromised, and that Taheeterree is to have the possession of the three neighbouring islands during his life; that Teewarro is acknowledged the Chief of Mowee, and will also succeed to the kingdom of Owhyhee on the death of Terreeoboo; and also to the sovereignty of the three islands, contiguous to Mowee, on the death of Taheeterree. Teewarro has been lately married to his half sister; and should he die without issue, the government of these islands descends to Maiha maiha, whom we have often had occasion to mention, he being the son of Kaihooa, the deceased brother of Terreeoboo. Should he also die without issue, they could not tell who would succeed; for the two youngest sons of Terreeoboo, one of whom he appears to be exceedingly fond of, being born of a woman of no rank, would, from this circumstance, be debarred all right of succession. We had not an opportunity of seeing queen Rora-rora, whom Terreeoboo had left behind at Mowee; but we have already had occasion to take notice, that he was accompanied by Kanee Kaberaia, the mother of the two youths, to whom he was very much attached.

From this account of the genealogy of the Owhyhee and Mowee monarchs, it is pretty clear that the government is hereditary; which also makes it very probable, that the inferior titles, and property itself, descend in the same course. With regard to Perreorannee, we could only learn, that he is an *Eree Taboo*; that he was invading the possession of Taheeterree, but on what pretence we were not informed; and that his grandsons governed the islands to leeward.

The power of the *Erees* over the inferior classes of people appears to be very absolute. Many instances of this occurred

1779.
March.

curred daily during our stay amongst them, and have been already related. The people, on the other hand, pay them the most implicit obedience; and this state of servility has manifestly had a great effect in debasing both their minds and bodies. It is, however, remarkable, that the Chiefs were never guilty, as far at least as came within my knowledge, of any acts of cruelty or injustice, or even of insolent behaviour toward them; though, at the same time, they exercised their power over one another in the most haughty and oppressive manner. Of this I shall give two instances. A Chief of the lower order had behaved with great civility to the master of the ship, when he went to examine Karakakooa bay, the day before the ship first arrived there; and, in return, I afterward carried him on board, and introduced him to Captain Cook, who invited him to dine with us. While we were at table, Pareea entered, whose face but too plainly manifested his indignation, at seeing our guest in so honourable a situation. He immediately seized him by the hair of the head, and was proceeding to drag him out of the cabin, when the Captain interfered; and, after a great deal of altercation, all the indulgence we could obtain, without coming to a quarrel with Pareea, was, that our guest should be suffered to remain, being seated upon the floor, whilst Pareea filled his place at the table. At another time, when Terseeoboo first came on board the Resolution, Maiha-maiha, who attended him, finding Pareea on deck, turned him out of the ship in the most ignominious manner; and yet Pareea, we certainly knew, to be a man of the first consequence.

How far the property of the lower class is secured against the rapacity and despotism of the great Chiefs, I cannot say; but it should seem, that it is sufficiently protected against
private

1779.
March.

private theft, or mutual depredation. For not only their plantations, which are spread over the whole country, but also their houses, their hogs, and their cloth, were left unguarded, without the smallest apprehensions. I have already remarked, that they not only separate their possessions by walls in the plain country, but that, in the woods likewise, wherever the horse-plantains grow, they make use of small white flags, in the same manner, and for the same purpose of discriminating property, as they do bunches of leaves at Otaheite. All which circumstances, if they do not amount to proofs, are strong indications that the power of the Chiefs, where property is concerned, is not arbitrary; but, at least, so far circumscribed and ascertained, as to make it worth the while for the inferior orders to cultivate the soil, and to occupy their possessions distinct from each other.

With respect to the administration of justice, all the information we could collect was very imperfect and confined. Whenever any of the lowest class of people had a quarrel amongst themselves, the matter in dispute was referred to the decision of some Chief, probably the Chief of the district, or the person to whom they appertained. If an inferior Chief had given cause of offence to one of a higher rank, the feelings of the latter at the moment seemed the only measure of his punishment. If he had the good fortune to escape the first transports of his superior's rage, he generally found means, through the mediation of some third person, to compound for his crime by a part or the whole of his property and effects. These were the only facts that came to our knowledge on this head.

The religion of these people resembles, in most of its principal features, that of the Society and Friendly Islands.

Their

Their *Morais*, their *Whattas*, their idols, their sacrifices, and their sacred songs, all of which they have in common with each other, are convincing proofs, that their religious notions are derived from the same source. In the length and number of their ceremonies, this branch indeed far exceeds the rest; and, though in all these countries, there is a certain class of men, to whose care the performance of their religious rites is committed; yet we had never met with a regular society of priests, till we discovered the cloisters of Kakooa in Karakakooa Bay. The head of this order was called *Orono*; a title which we imagined to imply something highly sacred, and which, in the person of Omeeah, was honoured almost to adoration. It is probable, that the privilege of entering into this order (at least as to the principal offices in it), is limited to certain families. Omeeah, the *Orono*, was the son of Kaoo, and the uncle of Kairee-keea; which last presided, during the absence of his grandfather, in all religious ceremonies at the *Morai*. It was also remarked, that the child of Omeeah, an only son, about five years old, was never suffered to appear without a number of attendants, and such other marks of care and solicitude, as we saw no other like instance of. This seemed to indicate, that his life was an object of the greatest moment, and that he was destined to succeed to the high rank of his father.

1779.
March.

It has been mentioned, that the title of *Orono*, with all its honours, was given to Captain Cook; and it is also certain, that they regarded us, generally, as a race of people superior to themselves; and used often to say, that great *Eatooa* dwelled in our country. The little image, which we have before described, as the favourite idol on the *Morai* in Karakakooa Bay, they call *Koonoorackaiee*, and said it was

1779.
March.

was Terreecboo's God; and that he also resided amongst us.

There are found an infinite variety of these images, both on the *Morais*, and within and without their houses, to which they give different names; but it soon became obvious to us in how little estimation they were held, from their frequent expressions of contempt of them, and from their even offering them to sale for trifles. At the same time, there seldom failed to be some one particular figure in favour, to which, whilst this preference lasted, all their adoration was addressed. This consisted in arraying it in red cloth; beating their drums, and singing hymns before it; laying bunches of red feathers, and different sorts of vegetables, at its feet; and exposing a pig, or a dog, to rot on the *whatta* that stood near it.

In a bay to the Southward of Karakakooa, a party of our gentlemen were conducted to a large house, in which they found the black figure of a man, resting on his fingers and toes, with his head inclined backward; the limbs well formed and exactly proportioned, and the whole beautifully polished. This figure the natives called *Mace*; and round it were placed thirteen others of rude and distorted shapes, which they said were the *Eatoos* of several deceased Chiefs, whose names they recounted. The place was full of *whattas*, on which lay the remains of their offerings. They likewise give a place in their houses to many ludicrous and some obscene idols, like the Priapus of the ancients.

It hath been remarked, by former voyagers, that both among the Society and Friendly Islanders, an adoration is paid to particular birds; and I am led to believe, that the same custom prevails here; and that, probably, the raven is the

the objects of it, from seeing two of these birds tame at the village of Kakooa, which they told me were *Eatooas*; and, refusing every thing I offered for them, cautioned me, at the same time, not to hurt or offend them.

1779.
March.

Amongst their religious ceremonies, may be reckoned the prayers and offerings made by the priests before their meals. Whilst the *ava* is chewing, of which they always drink before they begin their repast, the person of the highest rank takes the lead in a sort of hymn, in which he is presently joined by one, two, or more of the company; the rest moving their bodies, and striking their hands gently together, in concert with the fingers. When the *ava* is ready, cups of it are handed about to those who do not join in the song, which they keep in their hands till it is ended; when, uniting in one loud response, they drink off their cup. The performers of the hymn are then served with *ava*, who drink it after a repetition of the same ceremony; and, if there be present one of a very superior rank, a cup is, last of all, presented to him, which, after chanting some time alone, and being answered by the rest, and pouring a little out on the ground, he drinks off. A piece of the flesh that is dressed, is next cut off, without any selection of the part of the animal; which, together with some of the vegetables, being deposited at the foot of the image of the *Eatooa*, and a hymn chanted, their meal commences. A ceremony of much the same kind is also performed by the Chiefs, whenever they drink *ava*, between their meals.

Human sacrifices are more frequent here, according to the account of the natives themselves, than in any other islands we visited. These horrid rites are not only had recourse to upon the commencement of war, and preceding

1779.
March.

great battles, and other signal enterprizes ; but the death of any considerable Chief calls for a sacrifice of one or more *Towtows*, according to his rank ; and we were told, that ten men were destined to suffer on the death of *Terreeoboo*. What may (if any thing possibly can) lessen, in some small degree, the horror of this practice, is, that the unhappy victims have not the most distant intimation of their fate. Those who are fixed upon to fall, are set upon with clubs wherever they happen to be ; and, after being dispatched, are brought dead to the place, where the remainder of the rites are completed. The reader will here call to his remembrance the skulls of the captives, that had been sacrificed at the death of some great Chief, and which were fixed on the rails round the top of the *Morai* at *Kakooa*. We got a farther piece of intelligence upon this subject at the village of *Kowrowa* ; where, on our inquiring into the use of a small piece of ground, inclosed with a stone fence, we were told that it was an *Here-eere*, or burying-ground of a Chief ; and there, added our informer, pointing to one of the corners, lie the *tangata* and *wahene taboo*, or the man and woman who were sacrificed at his funeral.

To this class of their customs may also be referred that of knocking out their fore-teeth. Scarce any of the lower people, and very few of the Chiefs, were seen, who had not lost one or more of them ; and we always understood, that this voluntary punishment, like the cutting off the joints of the finger at the Friendly Islands, was not inflicted on themselves from the violence of grief, on the death of their friends, but was designed as a propitiatory sacrifice to the *Eatooa*, to avert any danger or mischief to which they might be exposed.

We were able to learn but little of their notions with regard to a future state. Whenever we asked them, whither the dead were gone? we were always answered, that the breath, which they appeared to consider as the soul, or immortal part, was gone to the *Eatooa*; and, on pushing our inquiries farther, they seemed to describe some particular place, where they imagined the abode of the deceased to be; but we could not perceive, that they thought, in this state, either rewards or punishments awaited them.

1779.
March.

Having promised the Reader, in the first Chapter, an explanation of what was meant by the word *taboo*; I shall, in this place, lay before him the particular instances that fell under our observation, of its application and effects. On our inquiring into the reasons of the interdiction of all intercourse between us and the natives, the day preceding the arrival of Terreeoboo, we were told, that the Bay was *tabooed*. The same restriction took place, at our request, the day we interred the bones of Captain Cook. In these two instances the natives paid the most implicit and scrupulous obedience; but whether on any religious principle, or merely in deference to the civil authority of their Chiefs, I cannot determine. When the ground near our observatories, and the place where our masts lay, were *tabooed*, by sticking small wands round them, this operated in a manner not less efficacious. But though this mode of consecration was performed by the priests only, yet still, as the men ventured to come within the space, when invited by us, it should seem, that they were under no religious apprehensions; and that their obedience was limited to our refusal only. The women could, by no means, be induced to come near us; but this was probably on account of the *Morai* adjoining; which they are prohibited, at all times, and in all the

1779.
March.

islands of those seas, from approaching. Mention hath been already made, that women are always *tabooed*, or forbidden, to eat certain kind of meats. We also frequently saw several at their meals, who had the meat put into their mouths by others; and on our asking the reason of this singularity, were told, that they were *tabooed*, or forbidden, to feed themselves. This prohibition, we understood, was always laid on them, after they had assisted at any funeral, or touched a dead body, and also on other occasions. It is necessary to observe, that, on these occasions, they apply the word *taboo* indifferently both to persons and things. Thus they say, the natives were *tabooed*, or the bay was *tabooed*, and so of the rest. This word is also used to express any thing sacred, or eminent, or devoted. Thus the king of Owhyhee was called *Eree-taboo*; a human victim, *tangata taboo*; and, in the same manner, among the Friendly Islanders, Tonga, the island where the king resides, is named *Tonga-taboo*.

Concerning their marriages, I can afford the reader little farther satisfaction, than informing him, that such a relation or compact exists amongst them. I have already had occasion to mention, that at the time Terreeoboo had left his queen Rora Rora at Mowee, he was attended by another woman, by whom he had children, and to whom he was very much attached; but how far polygamy, properly speaking, is allowed, or how far it is mixed with concubinage, either with respect to the king, the Chiefs, or among the inferior orders, too few facts came to our knowledge to justify any conclusions. It hath also been observed, that, except Kainee Kabareea, and the wife of the Orono, with three women whom I shall have occasion hereafter to mention, we never saw any female of high rank. From what I had an opportunity

1779.
March.

tunity of observing of the domestic concerns of the lowest class, the house seemed to be under the direction of one man and woman, and the children in the like state of subordination as in civilized countries.

It will not be improper, in this place, to take notice, that we were eye-witnesses of a fact, which, as it was the only instance we saw of any thing like jealousy among them, shews, at the same time, that not only fidelity, but a degree of reserve, is required from the married women of consequence: At one of the entertainments of boxing, Omeah was observed to rise from his place two or three times, and to go up to his wife with strong marks of displeasure, ordering her, as it appeared to us from his manner, to withdraw. Whether it was, that being very handsome, he thought she drew too much of our attention, or without being able to determine what other reason he might have for his conduct, it is but justice to say, that there existed no real cause of jealousy. However, she kept her place; and when the entertainment was over, joined our party, and soliciting some trifling presents, was given to understand, that we had none about us; but that if she would accompany us toward our tent, she should return with such as she liked best. She was accordingly walking along with us; which Omeah observing, followed in a violent rage; and seizing her by the hair, began to inflict, with his fists, a severe corporal punishment. This sight, especially as we had innocently been the cause of it, gave us much concern; and yet we were told, that it would be highly improper to interfere between man and wife of such high rank. We were, however, not left without the consolation of seeing the natives at last interpose; and had the farther satisfaction of meeting them together the next day, in perfect good-humour with each other; and

4 what

1779.
March.

what is still more singular, the lady would not suffer us to remonstrate with her husband on his treatment of her, which we were much inclined to do, and plainly told us, that he had done no more than he ought.

Whilst I was ashore at the observatory at Karakakooa Bay, I had twice an opportunity of seeing a considerable part of their funeral rites. Intelligence was brought me of the death of an old Chief in a house near our observatories, soon after the event happened. On going to the place, I found a number of people assembled, and seated round a square *area*, fronting the house in which the deceased lay, whilst a man, in a red feathered cap, advanced from an interior part of the house to the door, and putting out his head, at almost every moment uttered a most lamentable howl, accompanied with the most singular grimaces, and violent distortions of his face, that can be conceived. After this had passed a short time, a large mat was spread upon the *area*, and two men and thirteen women came out of the house and seated themselves down upon it, in three equal rows; the two men, and three of the women, being in front. The necks and hands of the women were decorated with feathered ruffs; and broad green leaves, curiously scolloped, were spread over their shoulders. At one corner of this *area*, near a small hut, were half a dozen boys waving small white banners, and the tufted wands, or *taboo* sticks, which have been often mentioned in the former chapters, who would not permit us to approach them. This led me to imagine, that the dead body might be deposited in this little hut; but I afterward understood, that it was in the house where the man in the red cap opened the rites, by playing his tricks at the door. The company just mentioned, being seated on the mat, began to sing a melancholy
tune,

1779.
March.

tune, accompanied with a slow and gentle motion of the body and arms. When this had continued some time, they raised themselves on their knees, and, in a posture between kneeling and sitting, began by degrees to move their arms and their bodies with great rapidity, the tune always keeping pace with their motions. As these last exertions were too violent to continue long, they resumed, at intervals, their slower movements; and, after this performance had lasted an hour, more mats were brought and spread upon the *area*, and four or five elderly women, amongst whom, I was told, was the dead Chief's wife, advanced slowly out of the house, and seating themselves in the front of the first company, began to cry and wail most bitterly; the women in the three rows behind joining them, whilst the two men inclined their heads over them in a very melancholy and pensive attitude. At this period of the rites, I was obliged to leave them to attend at the observatory; but returning within half an hour, found them in the same situation. I continued with them till late in the evening, and left them proceeding with little variation, as just described; resolving, however, to attend early in the morning, to see the remainder of the ceremony. On my arrival at the house, as soon as it was day, I found to my mortification, the crowd dispersed, and every thing quiet; and was given to understand, that the corpse was removed; nor could I learn in what manner it was disposed of. I was interrupted in making farther inquiries for this purpose, by the approach of three women of rank, who, whilst their attendants stood near them with their fly-flaps, sat down by us, and, entering into conversation, soon made me comprehend, that our presence was a hindrance to the performance of some necessary rites.

I had

1779.
March.

I had hardly got out of sight, before I heard their cries and lamentations; and meeting them a few hours afterward, I found they had painted the lower part of their faces perfect black.

The other opportunity I had of observing these ceremonies, was in the case of an ordinary person; when, on hearing some mournful female cries issue from a miserable looking hut, I ventured into it, and found an old woman with her daughter, weeping over the body of an elderly man, who had but just expired, being still warm. The first step they took, was to cover the body with cloth, after which, lying down by it, they drew the cloth over themselves, and then began a mournful kind of song, frequently repeating, *Aweh medoaah! Aweh-tanee!* Oh my father! Oh my husband! A younger daughter was also at the same time lying prostrate, in a corner of the house, covered over with black cloth, repeating the same words. On leaving this melancholy scene, I found at the door a number of their neighbours collected together, and listening to their cries with profound silence. I was resolved not to miss this opportunity of seeing in what manner they dispose of the body; and therefore, after satisfying myself, before I went to bed, that it was not then removed, I gave orders, that the sentries should walk backward and forward before the house, and, in case they suspected any measures were taking for the removal of the body, to give me immediate notice. However, the sentries had not kept a good look-out, for in the morning I found the body was gone. On inquiring, what they had done with it? They pointed toward the sea; indicating, most probably, thereby, that it had been committed to the deep, or perhaps that it had been carried beyond the bay, to some burying-ground in
another

another part of the country. The Chiefs are interred in the *Morais*, or *Heree-erees*, with the men sacrificed on the occasion, by the side of them; and we observed, that the *Morai*, where the Chief had been buried, who, as I have already mentioned, was killed in the cave, after so stout a resistance, was hung round with red cloth.

1779.
March.

ASTOR LENOX TILDEN FOUNDATION
500 5th Avenue, New York 17, N.Y.

MAILED OCT 13 1961

NOV 1961

THE NEW YORK PUBLIC LIBRARY
ASTOR LENOX TILDEN FOUNDATION
500 5th Avenue, New York 17, N.Y.

NOV 1961

THE NEW YORK PUBLIC LIBRARY
ASTOR LENOX TILDEN FOUNDATION
500 5th Avenue, New York 17, N.Y.

THE NEW YORK PUBLIC LIBRARY
ASTOR LENOX TILDEN FOUNDATION
500 5th Avenue, New York 17, N.Y.

THE NEW YORK PUBLIC LIBRARY
ASTOR LENOX TILDEN FOUNDATION
500 5th Avenue, New York 17, N.Y.

A
V O Y A G E
TO THE
P A C I F I C O C E A N.

B O O K VI.

Transactions during the second Expedition to the North, by the Way of Kamtschatka; and on the return Home, by the Way of Canton, and the Cape of Good Hope.

C H A P. I.

Departure from Oneebew.—Fruitless Attempt to discover Modoopapappa.—Course steered for Awatska Bay.—Occurrences during that Passage.—Sudden Change from Heat to Cold.—Distress occasioned by the leaking of the Resolution.—View of the Coast of Kamtschatka.—Extreme Rigour of the Climate.—Lose Sight of the Discovery.—The Resolution enters the Bay of Awatska.—Prospect of the Town of Saint Peter and Saint Paul.—Party sent ashore.—Their Reception by the Commanding Officer of the Port.—Message dispatched to the Commander at Bolcheretsk.—Arrival of the Discovery.—

*Return of the Messengers, from the Commander.—
Extraordinary Mode of travelling.—Visit from a
Merchant, and a German Servant belonging to the
Commander.*

1779.
March.
Monday 15.

ON the 15th of March, at seven in the morning, we weighed anchor, and passing to the North of Tahoorā, stood on to the South West, in hopes of falling in with the island of Modoopapappa, which, we were told by the natives, lay in that direction, about five hours sail from Tahoorā. At four in the afternoon, we were overtaken by a stout canoe, with ten men, who were going from Onecheow to Tahoorā, to kill tropic and man-of-war birds, with which that place was said to abound. It has been mentioned before, that the feathers of these birds are in great request, being much used in making their cloaks, and other ornamental parts of their dress.

Tuesday 16.

At eight, having seen nothing of the island, we hauled the wind to the Northward, till midnight, and then tacked, and stood on a wind to the South East, till day-light next morning, at which time Tahoorā bore East North East, five or six leagues distant. We afterward steered West South West, and made the Discovery's signal to spread four miles upon our starboard beam. At noon, our latitude was $21^{\circ} 27'$, and our longitude $198^{\circ} 42'$; and having stood on till five, in the same direction, we made the Discovery's signal to come under our stern, and gave over all hopes of seeing Modoopapappa. We conceived, that it might probably lie in a more Southerly direction from Tahoorā, than that in which we had steered; though, after all, it is possible, that we might have passed it in the night, as the islanders described it

to be very small, and almost even with the surface of the sea.

1779.
March.

The next day, we steered West; it being Captain Clerke's intention to keep as near as possible in the same parallel of latitude, till we should make the longitude of Awatska Bay, and afterward to steer due North for the harbour of Saint Peter and Saint Paul in that bay; which was also appointed for our rendezvous, in case of separation. This track was chosen on account of its being, as far as we knew, unexplored; and we were not without hopes of falling in with some new islands on our passage.

Wednes. 17.

We had scarcely seen a bird, since our losing sight of Tahoorā, till the 18th in the afternoon, when, being in the latitude of $21^{\circ} 12'$, and the longitude of $194^{\circ} 45'$, the appearance of a great many boobies, and some man-of-war birds, made us keep a sharp look-out for land. Toward evening, the wind lessened, and the North East swell, which, on the 16th and 17th, had been so heavy as to make the ships labour exceedingly, was much abated. The next day, we saw no appearance of land; and at noon, we steered a point more to the Southward, viz. West by South, in the hopes of finding the trade winds (which blew almost invariably from the East by North) fresher as we advanced within the tropic. It is somewhat singular, that though we saw no birds in the forenoon, yet toward evening we had again a number of boobies and man-of-war birds about us. This seemed to indicate, that we had passed the land from whence the former flights had come, and that we were approaching some other low island.

Thursday 18.

Friday 19.

The wind continued very moderate, with fine weather, till the 23d, when it freshened from the North East by East, and

Tuesday 23.

1779.
March.

Thursday 25. and increased to a strong gale, which split some of our old sails, and made the running rigging very frequently give way. This gale lasted twelve hours; it then became more moderate, and continued so, till the 25th at noon, when we entirely lost it, and had only a very light air.

Friday 26.

On the 26th in the morning, we thought we saw land to the West South West, but, after running about sixteen leagues in that direction, we found our mistake; and night coming on, we again steered West. Our latitude, at this time, was $19^{\circ} 45'$, which was the greatest Southing we made in this run; our longitude was 183° , and variation $12^{\circ} 45'$ East. We continued in this course, with little

Monday 29.

alteration in the wind, till the 29th, when it shifted to the South East and South South East, and, for a few hours in the night, it was in the West; the weather being dark and cloudy, with much rain. We had met, for some days past, several turtles, one of which was the smallest I ever saw, not exceeding three inches in length. We were also accompanied by man-of-war birds, and boobies of an unusual kind, being quite white (except the tip of the wing, which was black), and easily mistaken, at first sight, for gannets.

The light winds which we had met with for some time past, with the present unsettled state of the weather, and the little appearance of any change for the better, induced Captain Clerke to alter his plan of keeping within the tropical latitudes; and accordingly, at six this evening, we began to steer North West by North, at which time our latitude was $20^{\circ} 23'$, and our longitude $180^{\circ} 40'$. During the continuance of the light winds, which prevailed almost constantly ever since our departure from the Sandwich Islands, the weather was very close, and the air hot and sultry;

fultry; the thermometer being generally at 80° , and sometimes at 83° . All this time, we had a considerable swell from the North East; and in no period of the voyage did the ships roll and strain so violently.

1779.
March.

In the morning of the 1st of April, the wind changed from the South East to the North East by East, and blew a fresh breeze, till the morning of the 4th, when it altered two points more to the East, and by noon increased to a strong gale, which lasted till the afternoon of the 5th, attended with hazy weather. It then again altered its direction to the South East, became more moderate, and was accompanied by heavy showers of rain. During all this time, we kept steering to the North West, against a slow but regular current from that quarter, which caused a constant variation from our reckoning by the log, of fifteen miles a day. On the 4th, being then in the latitude $26^{\circ} 17'$, and longitude $173^{\circ} 30'$, we passed prodigious quantities of what sailors call Portuguese men-of-war (*holothuria physalis*), and were also accompanied with a great number of sea birds, amongst which we observed, for the first time, the albatross and shearwater.

April.

Thursday 1.

Sunday 4.

Monday 5.

On the 6th, at noon, we lost the trade wind, and were suddenly taken a-back, with the wind from the North North West. At this time, our latitude was $29^{\circ} 50'$, and our longitude $170^{\circ} 1'$. As the old running ropes were constantly breaking in the late gales, we reeved what new ones we had left, and made such other preparations, as were necessary for the very different climate with which we were now shortly to encounter. The fine weather we met with between the tropics, had not been idly spent. The carpenters found sufficient employment in repairing the boats. The best bower cable had been so much damaged

Tuesday 6.

1779.
April.

by the foul ground in Karakakooa Bay, and whilst we were at anchor off Oneeheow, that we were obliged to cut forty fathoms from it; in converting of which, with other old cordage, into spun-yarn, and applying it to different uses, a considerable part of the people were kept constantly employed by the boatswain. The airing of sails and other stores, which, from the leakiness of the decks and sides of the ships, were perpetually subject to be wet, had now become a frequent as well as a laborious and troublesome part of our duty.

Besides these cares, which had regard only to the ships themselves, there were others, which had for their object the preservation of the health of the crews, that furnished a constant occupation to a great number of our hands. The standing orders, established by Captain Cook, of airing the bedding, placing fires between decks, washing them with vinegar, and smoking them with gunpowder, were observed without any intermission. For some time past, even the operation of mending the sailors old jackets had risen into a duty both of difficulty and importance. It may be necessary to inform those who are unacquainted with the disposition and habits of seamen, that they are so accustomed in ships of war to be directed in the care of themselves by their officers, that they lose the very idea of foresight, and contract the thoughtlessness of infants. I am sure, that if our people had been left to their own discretion alone, we should have had the whole crew naked, before the voyage had been half finished. It was natural to expect, that their experience, during our voyage to the North last year, would have made them sensible of the necessity of paying some attention to these matters; but if such reflections ever occurred to them, their impression was

so

o transitory, that, upon our return to the tropical climates, their fur jackets, and the rest of their cold country clothes, were kicked about the decks as things of no value; though it was generally known, in both ships, that we were to make another voyage toward the pole. They were, of course, picked up by the officers; and, being put into casks, restored about this time to the owners.

1779.
April.

In the afternoon, we observed some of the sheathing floating by the ship; and, on examination, found that twelve or fourteen feet had been washed off from under the larboard-bow, where we supposed the leak to have been; which, ever since our leaving Sandwich Islands, had kept the people almost constantly at the pumps, making twelve inches water an hour. This day we saw a number of small crabs, of a pale blue colour; and had again, in company, a few albatrosses and sheerwaters. The thermometer, in the night-time, sunk eleven degrees; and although it still remained as high as 59° , yet we suffered much from the cold; our feelings being, as yet, by no means, reconciled to that degree of temperature.

The wind continued blowing fresh from the North, till the eighth, in the morning, when it became more moderate, with fair weather, and gradually changed its direction to the East, and afterward to the South. Thursday 8.

On the ninth, at noon, our latitude was $32^{\circ} 16'$; our longitude $166^{\circ} 40'$; and the variation $8^{\circ} 30'$ East. And on the tenth, having crossed the track of the Spanish galleons from the Manillas to Acapulco, we expected to have fallen in with the Island of Rica de Plata, which, according to De Lisle's chart, in which the route of those ships is laid down, ought to have been in sight; its latitude, as there
Vol. III. A a given,

Friday 9.

Saturday 10.

1779.
April.

given, being $33^{\circ} 30'$ North, and its longitude 166° East. Notwithstanding we were so far advanced to the Northward, we saw this day a tropic bird, and also several other kinds of sea-birds; such as puffins, sea-parrots, shearwaters, and albatrosses.

Sunday 11.

On the eleventh, at noon, we were in latitude $35^{\circ} 30'$, longitude $165^{\circ} 45'$; and during the course of the day, had sea-birds, as before, and passed several bunches of sea-weed. About the same time, the Discovery passed a log of wood; but no other signs of land were seen.

Monday 12.

The next day the wind came gradually round to the East, and increased to so strong a gale, as obliged us to strike our top-gallant yards, and brought us under the lower sails, and the main top-sail close reefed. Unfortunately we were upon that tack, which was the most disadvantageous for our leak. But, as we had always been able to keep it under with the hand-pumps, it gave us no great uneasiness, till

Tuesday 13.

the 13th, about six in the afternoon, when we were greatly alarmed by a sudden inundation, that deluged the whole space between decks. The water, which had lodged in the coal-hole, not finding a sufficient vent into the well, had forced up the platforms over it, and in a moment set every thing afloat. Our situation was indeed exceedingly distressing; nor did we immediately see any means of relieving ourselves. A pump, through the upper decks into the coal-hole, could answer no end, as it would very soon have been choked up by the small coals; and, to bale the water out with buckets, was become impracticable, from the number of bulky materials that were washed out of the gunner's store-room into it, and which, by the ship's motion, were tossed violently from side to side. No other method was

therefore

therefore left, but to cut a hole through the bulk-head (or partition) that separated the coal-hole from the fore-hold, and by that means to make a passage for the body of water into the well. However, before that could be done, it was necessary to get the casks of dry provisions out of the fore-hold, which kept us employed the greatest part of the night; so that the carpenters could not get at the partition till the next morning. As soon as a passage was made, the greatest part of the water emptied itself into the well, and enabled us to get out the rest with buckets. But the leak was now so much increased, that we were obliged to keep one half of the people constantly pumping and baling, till the noon of the 15th. Our men bore, with great cheerfulness, this excessive fatigue, which was much increased by their having no dry place to sleep in; and, on this account, we began to serve their full allowance of grog.

1779.
April.

Wednes. 14.

Thursday 15.

The weather now becoming more moderate, and the swell less heavy, we were enabled to clear away the rest of the casks from the fore-hold, and to open a sufficient passage for the water to the pumps. This day we saw a greenish piece of drift-wood, and fancying the water coloured, we sounded, but got no bottom with a hundred and sixty fathoms of line. Our latitude, at noon this day, was $41^{\circ} 52'$, longitude $161^{\circ} 15'$; variation $6^{\circ} 30'$ East; and the wind soon after veering to the Northward, we altered our course three points to the West.

On the 16th, at noon, we were in the latitude of $42^{\circ} 12'$, and in the longitude of $160^{\circ} 5'$; and as we were now approaching the place where a great extent of land is said to have been seen by De Gama, we were glad of the opportunity which the course we were steering gave, of contributing to remove the doubts, if any should be still en-

Friday 16.

1779.
April.

tertained, respecting the falsehood of this pretended discovery. For it is to be observed, that no one has ever yet been able to find who John de Gama was, when he lived, or what year this pretended discovery was made.

According to Mr. Muller, the first account of it given to the Public was in a chart published by Texeira, a Portuguese geographer, in 1649, who places it in ten or twelve degrees to the North East of Japan, between the latitudes of 44° and 45° ; and announce it to be *land seen by John de Gama, the Indian, in a voyage from China to New Spain*. On what grounds the French geographers have since removed it five degrees to the Eastward, does not appear; except we suppose it to have been in order to make room for another discovery of the same kind made by the Dutch, called *Company's Land*; of which we shall have occasion to speak hereafter.

During the whole day, the wind was exceedingly unsettled, being seldom steady to two or three points; and blowing in fresh gusts, which were succeeded by dead calms. These were not unpromising appearances; but, after standing off and on, the whole of this day, without seeing any thing of the land, we again steered to the Northward, not thinking it worth our while to lose time in search of an object, the opinion of whose existence had been already pretty generally exploded. Our people were employed the whole of the 16th, in getting their wet things to dry, and in airing the ships below.

Sunday 18.

We now began to feel very sharply the increasing inclemency of the Northern climate. In the morning of the 18th, our latitude being $45^{\circ} 40'$, and our longitude $160^{\circ} 25'$, we had snow and fleet, accompanied with strong gales from the South West. This circumstance will appear

pear very remarkable, if we consider the season of the year, and the quarter from which the wind blew. On the 19th, the thermometer, in the day-time, remained at the freezing point, and at four in the morning fell to 29° . If the reader will take the trouble to compare the degree of heat, during the hot sultry weather we had at the beginning of this month, with the extreme cold which we now endured, he will conceive how severely so rapid a change must have been felt by us.

1779.
April.

Monday 19.

In the gale of the 18th, we had split almost all the sails we had bent, which being our second best suit, we were now reduced to make use of our last and best set. To add to Captain Clerke's difficulties, the sea was in general so rough, and the ships so leaky, that the sail-makers had no place to repair the sails in, except his apartments, which, in his declining state of health, was a serious inconvenience to him.

On the 20th, at noon, being in latitude $49^{\circ} 45'$ North, and longitude $161^{\circ} 15'$ East; and eagerly expecting to fall in with the coast of Asia, the wind shifted suddenly to the North, and continued in the same quarter the following day. However, although it retarded our progress, yet the fair weather it brought was no small refreshment to us. In the forenoon of the 21st, we saw a whale, and a land-bird; and, in the afternoon, the water looking muddy, we sounded, but got no ground with an hundred and forty fathoms of line. During the three preceding days, we saw large flocks of wild-fowl, of a species resembling ducks. This is usually considered as a proof of the vicinity of land; but we had no other signs of it, since the 16th; in which time we had run upward of an hundred and fifty leagues.

Tuesday 20.

Wednes. 21.

On

1779.
April.
Thursday 22.

On the 22d, the wind shifted to the North East, attended with misty weather. The cold was exceedingly severe, and the ropes were so frozen, that it was with difficulty we could force them through the blocks. At noon, the latitude, by account, was $51^{\circ} 38'$, longitude $160^{\circ} 7'$; and on comparing our present position with that given to the Southern parts of Kamtschatka, in the Russian charts, Captain Clerke did not think it prudent to run on toward the land all night. We therefore tacked at ten; and, having founded, had ground agreeably to our conjectures, with seventy fathoms of line.

Friday 23.

On the 23d, at six in the morning, being in latitude $52^{\circ} 09'$, and longitude $160^{\circ} 07'$, on the fog clearing away, the land appeared in mountains covered with snow; and extending from North three quarters East, to South West, a high conical rock, bearing South West, three quarters West, at three or four leagues distance. We had no sooner taken this imperfect view, than we were again covered with a thick fog. Being now, according to our maps, only eight leagues from the entrance of Awatska Bay, as soon as the weather cleared up, we stood in to take a nearer view of the land; and a more dismal and dreary prospect I never beheld. The coast appears straight and uniform, having no inlets or bays; the ground, from the shore, rises in hills of a moderate elevation, behind which are ranges of mountains, whose summits were lost in the clouds. The whole scene was entirely covered with snow, except the sides of some of the cliffs, which rose too abruptly from the sea for the snow to lie upon them.

Saturday 24.

The wind continued blowing very strong from the North East, with thick hazy weather and sleet, from the 24th till the 28th. During the whole time, the thermometer was never higher than $30\frac{1}{2}^{\circ}$. The ship appeared to be a com-

plete mafs of ice; the throwds were fo incrufted with it, as to meafure in circumference more than double their ufual fize; and, in fhort, the experience of the oldeft feaman among us, had never met with any thing like the continued fhowers of fleet, and the extreme cold, which we now encountered. Indeed the feverity of the weather, added to the great difficulty of working the fhips, and the labour of keeping the pumps constantly going, rendered the fervice too hard for many of the crew, fome of whom were froft-bitten, and others laid up with bad colds. We continued all this time ftanding four hours on each tack, having generally foundings of fixty fathoms, when about three leagues from the land; but none at twice that diftance. On the 25th, we had a tranfient view of the entrance of Awatka Bay; but, in the prefent ftate of the weather, we were afraid of venturing into it. Upon our ftanding off again, we loft fight of the Difcovery; but, as we were now fo near the place of rendezvous, this gave us no great uneafinefs.

1772.
April.

Sunday 25.

On the 28th, in the morning, the weather at laft cleared, and the wind fell to a light breeze from the fame quarter as before. We had a fine warm day; and, as we now began to expect a thaw, the men were employed in breaking the ice from off the rigging, masts, and fails, in order to prevent its falling on our heads. At noon, being in the latitude of $52^{\circ} 44'$, and the longitude of 159° , the entrance of Awatka Bay bore North Weft, diftant three or four leagues; and, about three in the afternoon, a fair wind fprung up from the Southward, with which we flood in, having regular foundings, from twenty-two to feven fathoms.

Wednes. 28.

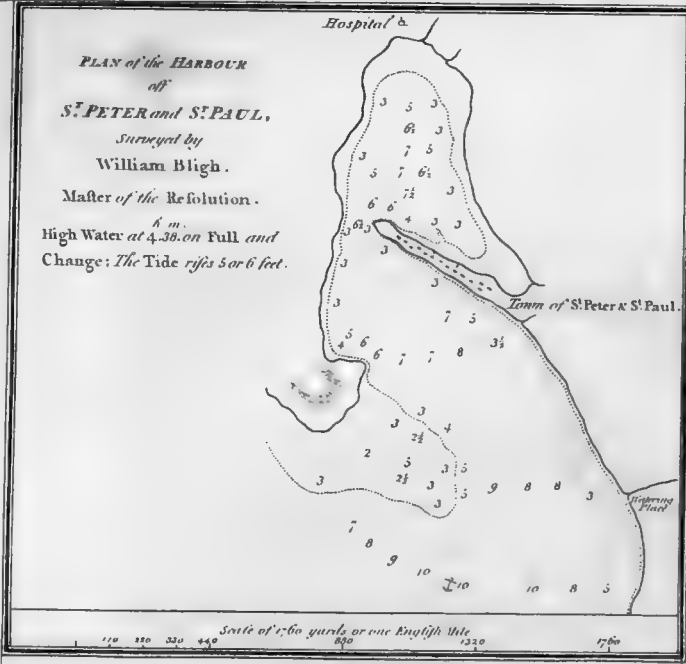
The

1779.
April.

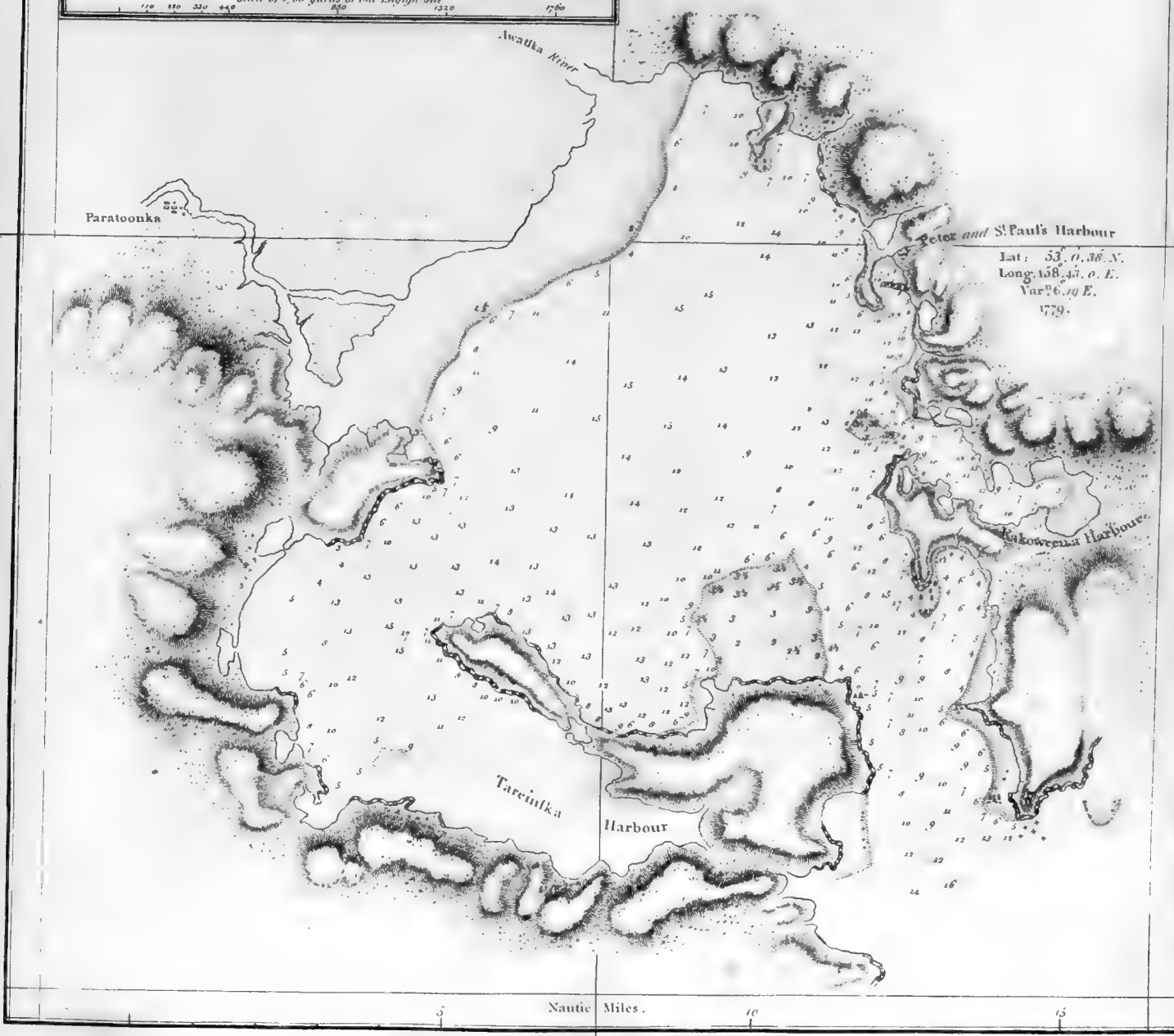
The mouth of the bay opens in a North North West direction. The land, on the South side, is of a moderate height; to the Northward, it rises into a bluff head, which is the highest part of the coast. In the channel between them, near the North East side, lie three remarkable rocks; and, farther in, near the opposite coast, a single detached rock of a considerable size. On the North head there is a look-out house, which, when the Russians expect any of their ships upon the coast, is used as a light-house. There was a flag-staff on it; but we saw no sign of any person being there.

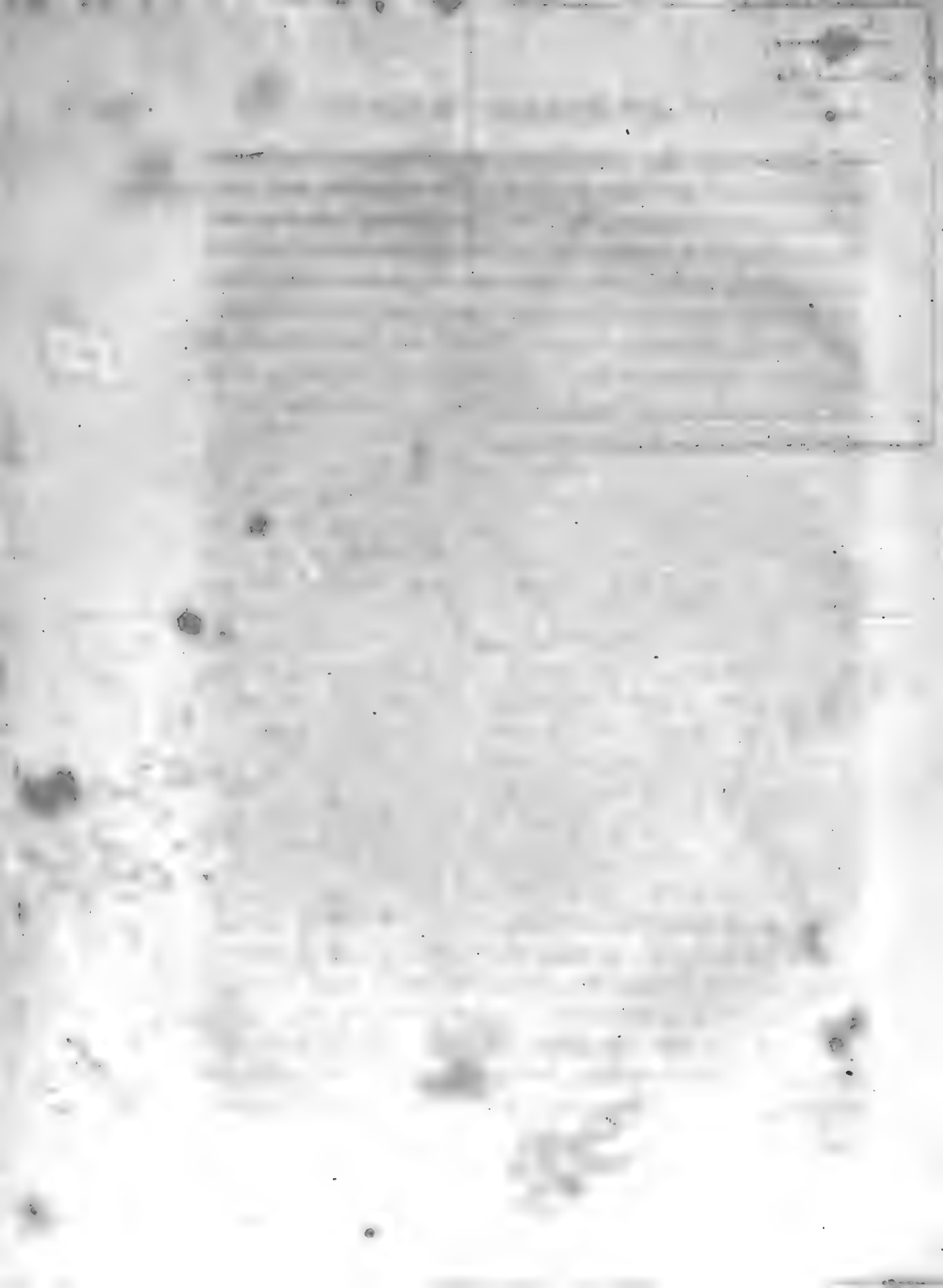
Having passed the mouth of the bay, which is about four miles long, we opened a large circular basin of twenty-five miles in circumference; and, at half past four, came to an anchor in six fathoms water, being afraid of running foul on a shoal, or some sunk rocks, which are said by Muller*, to lie in the channel of the harbour of St. Peter and St. Paul. The middle of the bay was full of loose ice, drifting with the tide; but the shores were still entirely blocked up with it. Great flocks of wild-fowl were seen of various species; likewise ravens, eagles, and large flights of Greenland pigeons. We examined every corner of the bay, with our glasses, in search of the town of St. Peter and St. Paul; which, according to the accounts given us at Oonalaska, we had conceived to be a place of some strength and consideration. At length we discovered, on a narrow point of land to the North North East, a few miserable log-houses, and some conical huts, raised on poles, amounting in all to about thirty; which, from their situation, notwithstanding all the respect we wished to entertain for a Russian *ofit*,

* Voyages made by the Russians from Asia to America, &c. translated from the German; by T. Jefferys, p. 37.



PLAN of the BAY
of
AWATSKA
on the
EAST COAST of KAMTSCHITKA





we were under the necessity of concluding to be Petropaulowska. However, in justice to the generous and hospitable treatment we found here, I shall beg leave to anticipate the reader's curiosity, by assuring him, that our disappointment proved to be more of a laughable than a serious nature. For, in this wretched extremity of the earth, situated beyond every thing that we conceived to be most barbarous and inhospitable, and, as it were, out of the very reach of civilization, barricaded with ice, and covered with summer snow, in a poor miserable port, far inferior to the meanest of our fishing towns, we met with feelings of humanity, joined to a greatness of mind, and elevation of sentiment, which would have done honour to any nation or climate.

1779.
April.

During the night, much ice drifted by us with the tide, and at day-light I was sent with the boats to examine the bay, and deliver the letters we had brought from Oonashka to the Russian Commander. We directed our course toward the village I have just mentioned, and having proceeded as far as we were able with the boats, we got upon the ice, which extended near half a mile from the shore. Mr. Webber, and two of the seamen, accompanied me, whilst the Master took the pinnace and cutter to finish the survey, leaving the jolly-boat behind to carry us back.

Thursday 29.

I believe the inhabitants had not yet seen either the ship or the boats; for even after we had got on the ice, we could not perceive any signs of a living creature in the town. By the time we had advanced a little way on the ice, we observed a few men hurrying backward and forward, and presently after, a sledge, drawn by dogs with one of the inhabitants in it, came down to the sea-side, opposite to us.

1779-
April.

Whilst we were gazing at this unusual sight, and admiring the great civility of this stranger, which we imagined had brought him to our assistance, the man, after viewing us for some time very attentively, turned short round, and went off, with great speed, toward the *ostrog*. We were not less chagrined than disappointed at this abrupt departure, as we began to find our journey over the ice, attended not only with great difficulty, but even with danger. We sunk at every step almost knee deep in the snow, and though we found tolerable footing at the bottom, yet the weak parts of the ice not being discoverable, we were constantly exposed to the risk of breaking through it. This accident at last actually happened to myself; for stepping on quickly over a suspicious spot, in order to press with less weight upon it, I came upon a second, before I could stop myself, which broke under me, and in I fell. Luckily, I rose clear of the ice, and a man that was a little way behind with a boat-hook, throwing it to me, I laid it across some loose pieces near me, and, by that means, was enabled to get upon firm ice again.

As we approached the shore, we found the ice, contrary to our expectations, more broken than it had been before. We were, however, again comforted by the sight of another sledge coming toward us, but instead of proceeding to our relief, the driver stopped short, and began to call out to us. I immediately held up to him Ismyloff's letters; upon which he turned about, and set off back again full speed; followed, I believe, not with the prayers of any of our party. Being at a great loss what conclusions to draw from this unaccountable behaviour, we continued our march toward the *ostrog*, with great circumspection, and when we had arrived within a quarter of a mile of it, we perceived a body

1779.
April.

of armed men marching toward us. That we might give them as little alarm, and have as peaceable an appearance as possible, the two men who had boat-hooks in their hands, were ordered into the rear, and Mr. Webber and myself marched in front. The Russian party, consisting of about thirty foldiers, was headed by a decent looking person, with a cane in his hand. He halted within a few yards of us, and drew up his men in a martial and good order. I delivered to him Ismyloff's letters, and endeavoured to make him understand, as well as I could (though I afterward found in vain), that we were English, and had brought them papers from Oonalashka. After having examined us attentively, he began to conduct us toward the village, in great silence and solemnity, frequently halting his men, to form them in different manners, and make them perform several parts of their manual exercise, probably with a view to shew us, that if we had the temerity to offer any violence, we should have to deal with men who were not ignorant of their business.

Though I was all this time in my wet clothes, shivering with cold, and sufficiently inclined to the most unconditional submission, without having my fears violently alarmed; yet it was impossible not to be diverted with this military parade, notwithstanding it was attended with the most unseasonable delay. At length, we arrived at the house of the Commanding Officer of the party, into which we were ushered; and, after no small stir in giving orders, and disposing of the military without doors, our host made his appearance, accompanied by another person, whom we understood to be the Secretary of the port. One of Ismyloff's letters was now opened, and the other sent off, by a special messenger, to Bolcheretsk, a town on the West side of the

1779.
April.

peninsula of Kamtschatka, where the Russian Commander of this province usually resides.

It is very remarkable, that they had not seen the ship the preceding day, when we came to anchor in the bay, nor indeed this morning, till our boats were pretty near the ice. The panic with which the discovery had struck them, we found, had been very considerable. The garrison was immediately put under arms. Two small field-pieces were placed at the entrance of the Commander's house, and pointed toward our boats; and shot, powder, and lighted matches were all ready at hand.

The officer, in whose house we were at present entertained, was a Serjeant, and the Commander of the *ostrog*. Nothing could exceed the kindness and hospitality of his behaviour, after he had recovered from the alarm occasioned by our arrival. We found the house insufferably hot, but exceedingly neat and clean. After I had changed my clothes, which the Serjeant's civility enabled me to do, by furnishing me with a complete suit of his own, we were invited to sit down to dinner, which I have no doubt was the best he could procure; and, considering the shortness of time he had to provide it, was managed with some ingenuity. As there was not time to prepare soup and *bouilli*, we had, in their stead, some cold beef sliced, with hot water poured over it. We had next a large bird roasted, of a species with which I was unacquainted, but of a very excellent taste. After having eaten a part of this, it was taken off, and we were served with fish dressed two different ways; and, soon after, the bird again made its appearance, in savory and sweet *patés*. Our liquor, of which I shall have to speak hereafter, was of the kind called by the Russians *quass*, and

was

was much the worst part of the entertainment. The Serjeant's wife brought in several of the dishes herself, and was not permitted to sit down at table. Having finished our repast, during which it is hardly necessary to remark, that our conversation was confined to a few bows, and other signs of mutual respect, we endeavoured to open to our host the cause and objects of our visit to this port. As Ismyloff had probably written to them on the same subject, in the letters we had before delivered, he appeared very readily to conceive our meaning; but as there was unfortunately no one in the place that could talk any other language except Russian or Kamtschadale, we found the utmost difficulty in comprehending the information he meant to convey to us. After some time spent in these endeavours to understand one another, we conceived the sum of the intelligence we had procured to be, that though no supply, either of provisions or naval stores were to be had at this place, yet that these articles were in great plenty at Bolcheretsk. That the Commander would, most probably, be very willing to give us what we wanted; but that, till the Serjeant had received orders from him, neither he nor his people, nor the natives, could even venture to go on board the ship.

It was now time for us to take our leave; and, as my clothes were still too wet to put on, I was obliged to have recourse again to the Serjeant's benevolence, for his leave to carry those I had borrowed of him on board. This request was complied with very cheerfully, and a sledge, drawn by five dogs, with a driver, was immediately provided for each of our party. The sailors were highly delighted with this mode of conveyance; and what diverted them still more was, that the two boat-hooks had also a sledge appropriated to themselves. These sledges are so light, and their con-

1779.
April.

1779.
April.

struction so well adapted to the purposes for which they are intended, that they went with great expedition, and perfect safety, over the ice, which it would have been impossible for us, with all our caution, to have passed on foot.

Friday 30.

On our return, we found the boats towing the ship toward the village; and at seven we got close to the ice, and moored with the small bower to the North East, and best bower to the South West; the entrance of the bay bearing South by East, and South three-quarters East; and the *ostrog* North, one quarter East, distant one mile and a half. The next morning, the casks and cables were got upon the quarter-deck, in order to lighten the ship forward; and the carpenters were set to work to stop the leak, which had given us so much trouble during our last run. It was found to have been occasioned by the falling of some sheathing from the larboard-bow, and the oakum between the planks having been washed out. The warm weather we had in the middle of the day, began to make the ice break away very fast, which, drifting with the tide, had almost filled up the entrance of the bay. Several of our gentlemen paid their visits to the Serjeant, by whom they were received with great civility; and Captain Clerke sent him two bottles of rum which he understood would be the most acceptable present he could make him, and received in return some fine fowls of the grouse kind, and twenty trouts. Our sportsmen met with but bad success; for though the bay swarmed with flocks of ducks of various kinds, and Greenland pigeons, yet they were so shy, that they could not come within shot of them.

May.
Saturday 1

In the morning of the 1st of May, seeing the *Discovery* standing into the bay, a boat was immediately sent to her assistance;

assistance; and in the afternoon, she moored close by us. They told us, that after the weather cleared up on the 28th, the day on which she had parted company, they found themselves to leeward of the bay, and that, when they got abreast of it, the following day, and saw the entrance choaked up with ice, they stood off, after firing guns, concluding we could not be here; but finding afterward it was only loose drift-ice, they had ventured in. The next day, the weather was so very unsettled, attended with heavy showers of snow, that the carpenters were not able to proceed in their work. The thermometer stood at 28° in the evening, and the frost was exceedingly severe in the night.

1779.
May.

Sunday 2.

The following morning, on our observing two sledges drive into the village, Captain Clerke sent me on shore, to inquire whether any message was arrived from the Commander of Kamtschatka, which, according to the serjeant's account, might now be expected, in consequence of the intelligence that had been sent of our arrival. Bolcheretsk, by the usual route, is about one hundred and thirty-five English miles from Saint Peter and Saint Paul's. Our dispatches were sent off in a sledge drawn by dogs, on the 29th, about noon. And the answer arrived, as we afterward found, early this morning; so that they were only a little more than three days and a half in performing a journey of two hundred and seventy miles.

Monday 3.

The return of the Commander's answer was, however, concealed from us for the present; and I was told, on my arrival at the serjeant's, that we should hear from him the next day. Whilst I was on shore, the boat, which had brought me, together with another belonging to the Discovery, were set fast in the ice, which a Southerly wind had driven

1779.
May.

driven from the other side of the bay. On seeing them entangled, the Discovery's launch had been sent to their assistance, but soon shared the same fate; and, in a short time, the ice had surrounded them near a quarter of a mile deep. This obliged us to stay on shore till evening, when finding no prospect of getting the boats off, some of us went in sledges to the edge of the ice, and were taken off by boats sent from the ship, and the rest staid on shore all night.

Tuesday 4.

It continued to freeze hard during the night; but, before morning, on the 4th, a change of wind drifted away the floating ice, and set the boats at liberty, without their having sustained the smallest damage.

About ten o'clock in the forenoon, we saw several sledges driving down the edge of the ice, and sent a boat to conduct the persons who were in them on board. One of these was a Russian merchant from Bolcheretsk, named Fedotisch, and the other a German, called Port, who had brought a letter from Major Behm, the Commander of Kamtschatka, to Captain Clerke. When they got to the edge of the ice, and saw distinctly the size of the ships, which lay within about two hundred yards from them, they appeared to be exceedingly alarmed; and, before they would venture to embark, desired two of our boat's crew might be left on shore as hostages for their safety. We afterward found, that Isnyloff, in his letter to the commander, had misrepresented us, for what reasons we could not conceive, as two small trading boats, and that the serjeant, who had only seen the ships at a distance, had not, in his dispatches, rectified the mistake.

When they arrived on board, we still found, from their cautious and timorous behaviour, that they were under some unaccountable apprehensions; and an uncommon degree

gree of satisfaction was visible in their countenances, on the German's finding a person amongst us, with whom he could converse. This was Mr. Webber, who spoke that language perfectly well; and at last, though with some difficulty, convinced them, that we were Englishmen, and friends. Mr. Port being introduced to Captain Clerke, delivered to him the Commander's letter, which was written in German, and was merely complimentary, inviting him and his officers to Bolcheretsk, to which place the people, who brought it, were to conduct us. Mr. Port, at the same time, acquainted him, that the Major had conceived a very wrong idea of the size of the ships, and of the service we were engaged in; Ismyloff, in his letter, having represented us as two small English packet boats, and cautioned him to be on his guard; insinuating, that he suspected us to be no better than pirates. In consequence of this letter, he said, there had been various conjectures formed about us at Bolcheretsk: that the Major thought it most probable we were on a trading scheme, and for that reason had sent down a merchant to us; but that the officer, who was second in command, was of opinion we were French, and come with some hostile intention, and were for taking measures accordingly. It had required, he added, all the Major's authority to keep the inhabitants from leaving the town, and retiring up into the country; to so extraordinary a pitch had their fears risen, from their persuasion that we were French.

Their extreme apprehensions of that nation were principally occasioned, by some circumstances attending an insurrection that had happened at Bolcheretsk, a few years before, in which the Commander had lost his life. We were informed, that an exiled Polish officer, named Beniowski, taking advantage of the confusion into which the town was

1779.
May.

1779.
May.

thrown, had seized upon a galliot, then lying at the entrance of the Bolschoireeka, and had forced on board a number of Russian sailors, sufficient to navigate her: that he had put on shore a part of the crew at the Kourile Islands; and, among the rest, Ismyloff, who, as the reader will recollect, had puzzled us exceedingly, at Oonalashka, with the history of this transaction; though, for want of understanding his language, we could not then make out all the circumstances attending it: that he passed in sight of Japan; made Luconia; and was there directed how to steer to Canton: that, arriving there, he had applied to the French, and had got a passage in one of their India ships to France: and that most of the Russians had likewise returned to Europe in French ships; and had afterward found their way to Petersburg. We met with three of Beniowski's crew in the harbour of Saint Peter and Saint Paul; and from them we learnt the circumstances of the above story.

On our arrival at Canton, we received a farther corroboration of the facts, from the gentlemen of the English factory, who told us, that a person had arrived there in a Russian galliot, who said he came from Kamtschatka; and that he had been furnished by the French factory, with a passage to Europe*.

We could not help being much diverted with the fears and apprehensions of these good people, and particularly with the account M. Port gave us of the serjeant's wary proceedings the day before. On seeing me come on shore, in company with some other gentlemen, he had made him and the merchant, who arrived in the sledges we had seen come

* It hath since appeared, from the account of Kerguelen's Voyage, that this extraordinary person, who had entered into the French service, was commander of a new settlement at Madagascar, when Kerguelen touched there in 1774.

in the morning, hide themselves in his kitchen, and listen to our conversation with one another, in hopes, that by this means, they might discover whether we were really English or not.

1779.
May.

As we concluded, from the commission and dress of M. Port, that he might probably be the Commander's secretary, he was received as such, and invited, with his companion, the merchant, to dine with Captain Clerke: and though we soon began to suspect, from the behaviour of the latter toward him, that he was only a common servant, yet this being no time to sacrifice our little comforts to our pride, we prevented an explanation, by not suffering the question to be put to him; and, in return for the satisfaction we reaped from his abilities as a linguist, we continued to let him live on a footing of equality with us.

C H A P. II.

Scarcity of Provisions and Stores at the Harbour of Saint Peter and Saint Paul. — A Party set out to visit the Commander at Bolcheretsk. — Passage up the River Awatska. — Account of their Reception by the Toion of Karatchin. — Description of a Kamtschadale Dress. — Journey on Sledges. — Description of this Mode of Travelling. — Arrival at Natcheeekin. — Account of hot Springs. — Embark on the Bolchoireka. — Reception at the Capital. — Generous and hospitable Conduct of the Commander and the Garrison. — Description of Bolcheretsk. — Presents from the Commander. — Russian and Kamtschadale Dancing. — Affecting Departure from Bolcheretsk. — Return to Saint Peter and Saint Paul's, accompanied by Major Behm, who visits the Ships. — Generosity of the Sailors. — Dispatches sent by Major Behm to Petersburg. — His Departure and Character.

1779.
May.

BEING now enabled to converse with the Russians, by the aid of our interpreter, with tolerable facility, our first inquiries were directed to the means of procuring a supply of fresh provisions, and naval stores; from the want of which latter article, in particular, we had been for some time in great distress. On inquiry, it appeared, that the whole flock of live cattle, which the country about the bay

could furnish, amounted only to two heifers; and these the serjeant very readily promised to procure us. Our applications were next made to the merchant, but we found the terms, upon which he offered to serve us, so exorbitant, that Captain Clerke thought it necessary to send an officer to visit the Commander at Bolcheretsk, and to inquire into the price of stores at that place. As soon as this determination was communicated to Mr. Port, he dispatched an express to the Commander, to inform him of our intentions, and, at the same time, to clear us from the suspicions that were entertained with respect to the designation and purposes of our voyage.

1779.
May.

—

Captain Clerke having thought proper to fix on me for this service, I received orders, together with Mr. Webber, who was to accompany me as interpreter, to be ready to set out the next day. It proved, however, too stormy, as did also the 6th, for beginning a journey through so wild and desolate a country; but, on the 7th, the weather appearing more favourable, we set out early in the morning in the ship's boats, with a view to reach the entrance of the Awatska at high water, on account of the shoals with which the mouth of that river abounds: here the country boats were to meet us, and carry us up the stream.

Tuesday 4.

Wednesday 5.

Thursday 6.

Friday 7.

Captain Gore was now added to our party, and we were attended by Messrs. Port and Fedositsch, with two coffacks, and were provided, by our conductors, with warm furred clothing; a precaution which we soon found very necessary, as it began to snow briskly just after we set out. At eight o'clock, being stopped by shoal water, about a mile from the mouth of the river, some small canoes, belonging to the Kamtschadales, took up us and our baggage, and carried

1779.
May.

carried us over a spit of sand, which is thrown up by the rapidity of the river, and which, they told us, was continually shifting. When we had crossed this shoal, the water again deepened; and here we found a commodious boat, built and shaped like a Norway yawl, ready to convey us up the river, together with canoes for our baggage.

The mouth of the Awatka is about a quarter of a mile broad; and as we advanced, it narrowed very gradually. After we had proceeded a few miles, we passed several branches, which, we were told, emptied themselves into other parts of the bay; and that some of those on the left hand, flowed into the Paratounca river. Its general direction from the bay, for the first ten miles, is to the North, after which it turns to the Westward: this bend excepted, it preserves, for the most part, a straight course; and the country, through which it flows, to the distance of near thirty miles from the sea, is low and flat, and subject to frequent inundations. We were pushed forward by six men, with long poles, three at each end of the boat; two of whom were cossacks, the others Kamtschadales; and advanced against a strong stream, at the rate, as well as I could judge, of about three miles an hour. Our Kamtschadales bore this severe labour, with great stoutness, for ten hours; during which we stopped only once, and that for a short time, whilst they took some little refreshment. As we had been told, at our first setting out in the morning, that we should easily reach an *Ostrog*, called Karatchin, the same night, we were much disappointed to find ourselves, at sun-set, fifteen miles from that place. This we attributed to the delay occasioned in passing the shoals we had met with, both at the entrance of the river, and in several other places, as we proceeded up it: for our boat being the first that had passed up
the

the river, the guides were not acquainted with the situation of the shifting sand-banks, and unfortunately the snow not having yet begun to melt, the shallowness of the river was at its extreme.

1779.
May.

The fatigue our men had already undergone, and the difficulty of navigating the river, which would have been much increased by the darkness of the night, obliged us to give up all thoughts of continuing our journey that evening. Having therefore found a place tolerably sheltered, and cleared it of the snow, we erected a small *marquée*, which we had brought with us; and, by the assistance of a brisk fire, and some good punch, passed the night not very unpleasantly. The only inconvenience we laboured under was, the being obliged to make the fire at some distance from us. For, although the ground was, to all appearance, dry enough before, yet when the fire was lighted, it soon thawed all the parts round it into an absolute puddle. We admired much the alertness and expedition with which the Kamtschadales erected our *marquée*, and cooked our provisions; but what was most unexpected, we found they had brought with them their tea-kettles, considering it as the greatest of hardships not to drink tea two or three times a day.

We set out as soon as it was light, in the morning, and had not advanced far, before we were met by the *Toion*, or Chief of Karatchin, who had been apprized of our coming, and had provided canoes that were lighter, and better contrived for navigating the higher parts of the river. A commodious vessel, consisting of two canoes, lashed close together with cross spars, lined with bear-skins, and furnished with fur cloaks, was also provided for us. We now
went

Saturday 8.

1779.
May.

went on very rapidly, the *Toion's* people being both stout and fresh, and remarkable for their expertness in this business. At ten we got to the *Ostrog*, the seat of his command, where we were received at the water-side by the Kamtschadale men and women, and some Russian servants belonging to Fedofitsch, who were employed in making canoes. They were all dressed out in their best clothes. Those of the women were pretty and gay, consisting of a full loose robe, of white nankeen, gathered close round the neck, and fastened with a collar of coloured silk. Over this they wore a short jacket, without sleeves, made of different coloured nankeens, and petticoats of a slight Chinese silk. Their shifts, which had sleeves down to the wrists, were also of silk; and coloured silk handkerchiefs were bound round their heads, concealing entirely the hair of the married women, whilst those who were unmarried, brought the handkerchief under the hair, and suffered it to flow loose behind.

This *ostrog* was pleasantly situated by the side of the river; and consisted of three log-houses; three *jourts*, or houses made under ground; and nineteen *balagans*, or summer habitations. We were conducted to the dwelling of the *Toion*, who was a plain decent man, born of a Russian woman, by a Kamtschadale father. His house, like all the rest in this country, was divided into two apartments. A long narrow table, with a bench round it, was all the furniture we saw in the outer; and the household stuff of the inner, which was the kitchen, was not less simple and scanty. But the kind attention of our host, and the hearty welcome we received, more than compensated for the poverty of his lodgings.

His

His wife proved an excellent cook; and served us with fish and game of different sorts, and various kinds of heath-berries, that had been kept since the last year. Whilst we were at dinner in this miserable hut, the guests of a people, with whose existence we had before been scarce acquainted, and at the extremity of the habitable globe, a solitary, half-worn pewter spoon, whose shape was familiar to us, attracted our attention; and, on examination, we found it stamped on the back with the word *London*. I cannot pass over this circumstance in silence, out of gratitude for the many pleasant thoughts, the anxious hopes, and tender remembrances it excited in us. Those, who have experienced the effects that long absence and extreme distance from their native country produce on the mind, will readily conceive the pleasure such trifling incidents can give. To the philosopher and the politician they may perhaps suggest reflections of a different nature.

1779-
May.

We were now to quit the river, and perform the next part of our journey on sledges; but the thaw had been too powerful in the day-time, to allow us to set out, till the cold of the evening had again made the surface of the snow hard and firm. This gave us an opportunity of walking about the village, which was the only place we had yet seen free from snow since we landed in this country. It stood upon a well-wooded flat, of about a mile and a half in circumference. The leaves were just budding, and the verdure of the whole scene was strongly contrasted with the sides of the surrounding hills, which were still covered with snow. As the soil appeared to me very capable of producing all the common sorts of garden vegetables, I was greatly surprised not to find the smallest spot any where cultivated. If to this we add, that none of the inhabitants were possessed of cattle of any sort, nothing can be well conceived more

1779.
May.

wretched than their situation must be during the winter months. They were at this time removing from their *jourts* into their *balagans*, which afforded us an opportunity of examining both these sorts of habitations; and they will be hereafter more particularly described. The people invited us into their houses with great good humour; a general air of cheerfulness and content was every where visible, to which the approaching change of season might probably not a little contribute.

On our return to the *Toion's*, we found supper prepared for us, which differed in nothing from our former repast; and concluded with our treating the *Toion* and his wife with some of the spirits, we had brought with us, made into punch. Captain Gore, who had great generosity on all occasions, having afterward made them some valuable presents, they retired to the kitchen, leaving us in possession of the outward room, where, spreading our bear-skins on the benches, we were glad to get a little repose, having settled with our conductors to resume our journey, as soon as the ground should be judged fit for travelling.

About nine o'clock, the same evening, we were awakened by the melancholy howlings of the dogs, which continued all the time our baggage was lashing upon the sledges; but, as soon as they were yoked, and we were all prepared to set out, this changed into a light cheerful yelping, which intirely ceased the instant they marched off. But, before we set out, the Reader may expect to be made more particularly acquainted with this curious mode of travelling.

The figure of the sledges will be best conceived by the annexed engraving, which was taken from one I brought over with me, that is now in the possession of Sir Ashton Lever. The body is about four feet and a half long, and a foot wide, made in the form of a crescent, of light tough wood,

1779-
May.

wood, strongly bound together with wicker work; which in those belonging to the better sort of people is elegantly stained of a red and blue colour, and the seat covered with bear-skins, or other furs. It is supported by four legs, about two feet high, which rest on two long flat pieces of wood, five or six inches broad, extending a foot at each end beyond the body of the sledge. These are turned up before in the manner of a skate, and shod with the bone of some sea-animal. The fore-part of the carriage is ornamented with thongs of leather and tassels of coloured cloth; and from the cross bar, to which the harness is joined, are hung links of iron, or small bells, the jingling of which they conceive to be encouraging to the dogs. They are seldom used to carry more than one person at a time, who sits aside, resting his feet on the lower part of the sledge, and carrying his provisions and other necessaries, wrapped up in a bundle, behind him. The dogs are usually five in number, yoked two and two, with a leader. The reins not being fastened to the head of the dogs, but to the collar, have little power over them, and are therefore generally hung upon the sledge, whilst the driver depends entirely on their obedience to his voice for the direction of them. With this view, the leader is always trained up with a particular degree of care and attention; some of them rising to a most extraordinary value on account of their docility and steadiness; insomuch, that for one of these, I am well assured, forty roubles (or ten pounds) was no unusual price. The driver is also provided with a crooked stick, which answers the purpose both of whip and reins; as by striking it into the snow, he is enabled to moderate the speed of the dogs, or even to stop them entirely; and when they are lazy, or otherwise inattentive to his voice, he chastises them by throwing it at them. Upon these occasions, their dexterity in picking it up again is very remarkable,

1779.
May.

and forms the principal difficulty of their art. But it is indeed not surprising, that they should labour to be skilful in a practice upon which their safety so materially depends. For they say, that if the driver should happen to lose his stick, the dogs will instantly perceive it; and unless their leader be of the most sober and resolute kind, they will immediately run a-head full speed, and never stop till they are quite spent. But as that will not be the case soon, it generally happens, that either the carriage is overturned, and dashed to pieces against the trees, or they hurry down some precipice, and are all buried in the snow. The accounts that were given us of the speed of these dogs, and of their extraordinary patience of hunger and fatigue, were scarcely credible, if they had not been supported by the best authority. We were indeed ourselves witnesses of the great expedition with which the messenger, who had been dispatched to Bolcheretsk with the news of our arrival, returned to the harbour of St. Peter and St. Paul, though the snow was, at this time, exceedingly soft. But I was informed, by the Commander of Kamtschatka, that this journey was generally performed in two days and a half; and that he had once received an express from the latter place in twenty-three hours.

The dogs are fed, during the winter, on the offals of dried and stinking fish; but are always deprived of this miserable food, a day before they set out on a journey, and never suffered to eat before they reach the end of it. We were also told, that it was not unusual for them to continue thus fasting two entire days, in which time they would perform a journey of one hundred and twenty miles *. These
dogs

* Extraordinary as this may appear, Kraschinikoff, whose account of Kamtschatka, from every thing that I saw, and had an opportunity of comparing it with,
seems

dogs are, in shape, somewhat like the Pomeranian breed, but considerably larger.

1779.
May.

As we did not choose to trust to our own skill, we had each of us a man to drive and guide the sledge, which, from the state the roads were now in, proved a very laborious business. For, as the thaw had advanced very considerably in the vallies, through which our road lay, we were under the necessity of keeping along the sides of the hills; and this obliged our guides, who were provided with snow-shoes for that purpose, to support the sledges, on the lower side, with their shoulders, for several miles together. I had a very good-humoured Cossack to attend me, who was, however, so very unskilful in his business, that we were overturned almost every minute, to the great entertainment of the rest of the company. Our party consisted, in all, of ten sledges. That in which Captain Gore was carried, was made of two lashed together, and abundantly provided with furs and bear-skins; it had ten dogs, yoked four abreast; as had also some of those that were heavy laden with baggage.

When we had proceeded about four miles, it began to rain; which, added to the darkness of the night, threw us all into confusion. It was at last agreed, that we should remain, where we were, till day-light; and accordingly we came to anchor in the snow (for I cannot better express the manner in which the sledges were secured), and wrapping

seems to me to deserve entire credit; and whose authority *I shall*, therefore, frequently have recourse to; relates instances of this kind, that are much more surprising. "Travelling parties," says he, "are often overtaken with dreadful storms of snow, on the approach of which, they drive, *with the utmost precipitation, into the nearest wood*, and there are obliged to stay, till the tempest, which frequently lasts six or seven days, is over; the dogs remaining all this while quiet and inoffensive; except that, sometimes, when pressed by hunger, they will devour their reins, and the other leathern parts of the harness."

History and Description of Kamtschatka, by Kraschininikoff.

1779.
May.
Sunday 9.

ourselves up in our furs, waited patiently for the morning. About three o'clock we were called on to set out, our guides being apprehensive, that if we waited longer, we might be stopped by the thaw, and neither be able to proceed, nor to return. After encountering many difficulties, which were principally occasioned by the bad condition of the road, at two in the afternoon, we got safe to an *ostrog*, called Natchekin, situated on the side of a small stream, which falls into the Bolchoireka, a little way below the town. The distance between Karatchin and Natchekin is thirty-eight wersts (or twenty-five miles); and had the hard frost continued, we should not, by their account, have been more than four hours in performing it; but the snow was so soft, that the dogs, almost at every step, sunk up to their bellies; and I was indeed much surprised at their being at all able to overcome the difficulties of so fatiguing a journey.

Natchekin is a very inconsiderable *ostrog*, having only one log-house, the residence of the *Toion*; five *balagans*, and one *jourt*. We were received here with the same formalities, and in the same hospitable manner, as at Karatchin; and in the afternoon we went to visit a remarkable hot spring, which is near this village. We saw, at some distance, the steam rising from it, as from a boiling caldron; and as we approached, perceived the air had a strong sulphureous smell. The main spring forms a basin of about three feet in diameter; besides which, there are a number of lesser springs, of the same degree of heat, in the adjacent ground; so that the whole spot, to the extent of near an acre, was so hot, that we could not stand two minutes in the same place. The water flowing from these springs is collected in a small bathing pond, and afterward forms a little rivulet; which, at the distance of about an hundred and fifty yards, falls into the river. The bath, they told us, had wrought great
cures

cures in several disorders, such as rheumatisms, swelled and contracted joints, and scorbutic ulcers. In the bathing-place the thermometer stood at 100°, or blood heat; but in the spring, after being immersed two minutes, it was 1° above boiling spirits. The thermometer in the air, at this time, was 34°; in the river 40°; and in the *Toion's* house 64°. The ground where these springs break out, is on a gentle ascent; behind which there is a green hill of a moderate size. I am sorry I was not sufficiently skilled in botany to examine the plants, which seemed to thrive here with great luxuriance; the wild garlic, indeed, forced itself on our notice, and was at this time springing up very vigorously.

1779.
May.

The next morning, we embarked on the Bolchoireka in canoes; and, having the stream with us, expected to be at our journey's end the day following. The town of Bolcheretsk is about eighty miles from Natcheequin; and we were informed, that, in the summer season, when the river has been full and rapid, from the melting of snow on the mountains, the canoes had often gone down in a single day; but that, in its present state, we should probably be much longer, as the ice had broken up only three days before we arrived; and that ours would be the first boat that had attempted to pass. This intelligence proved but too true. We found ourselves greatly impeded by the shallows; and though the stream, in many places, ran with great rapidity, yet every half mile, we had rippings and shoals, over which we were obliged to haul the boats. The country, on each side, was very romantic, but unvaried; the river running between mountains of the most craggy and barren aspect, where there was nothing to diversify the scene; but now and then the sight of a bear, and the flights of wild-fowl. So uninteresting a passage leaves me nothing farther to say, than.

Monday 10.

1779.
May.

Tuesday 11.

than that this; and the following night, we slept on the banks of the river, under our *marquée*; and suffered very much from the severity of the weather, and the snow, which still remained on the ground.

Wednes. 12.

At day-light on the 12th, we found we had got clear of the mountains, and were entering a low extensive plain, covered with shrubby trees. About nine in the forenoon, we arrived at an *ostrog*, called Opatchin, which is computed to be fifty miles from Natcheequin, and is nearly of the same size as Karatchin. We found here a serjeant with four Russian soldiers, who had been two days waiting for our arrival; and who immediately dispatched a light boat to Bolcheretfsk, with intelligence of our approach. We were now put into the trammels of formality; a canoe, furnished with skins and furs, and equipped in a magnificent manner, was prepared for our reception, in which we were accommodated much at our ease, but to the exclusion of the rest of our fellow-travellers. It was with much regret we found ourselves obliged to separate from our old companion Monsieur Port, whom we had observed to grow every day more shy and distant, as we drew nearer the end of our journey. Indeed, he had himself told us, before we set out, that we paid him a respect he had no title to; but as we found him a very modest and discreet man, we had insisted on his living with us during the whole of our journey. The remainder of our passage was performed with great facility and expedition, the river growing more rapid, as we descended, and less obstructed by shoals.

As we approached the capital, we were sorry to observe, from an appearance of much stir and bustle, that we were to be received in form. Decent clothes had been, for some
time,

time, a scarce commodity amongst us; and our travelling dresses were made up of a burlesque mixture of European, Indian, and Kamtschatdale fashions. We therefore thought it would be too ridiculous to make a parade in this trim through the metropolis of Kamtschatka; and as we saw a crowd collected on the banks of the river, and were told the Commander would be at the water-side to receive us, we stopped short at a soldier's house, about a quarter of a mile from the town, from whence we sent Port with a message to his Excellency, acquainting him, that the moment we had put off our travelling dresses, we would pay our respects to him at his own house; and to beg he would not think of waiting to conduct us. Finding, however, that he persisted in his intentions of paying us this compliment, we lost no farther time in attiring ourselves, but made all the haste in our power to join him at the entrance of the town. I observed my companions to be as awkward as I felt myself, in making our first salutations; bowing and scraping being marks of good-breeding that we had now, for two years and a half, been totally unaccustomed to. The manner in which we were received by the Commander, was the most engaging that could be conceived, and increased my mortification, at finding, that he had almost entirely forgot the French language; so that the satisfaction of conversing with him was wholly confined to Mr. Webber, who spoke the German, his native tongue.

In company with Major Behm, was Captain Shmaleff, the second in command, and another officer, with the whole body of the merchants of the place. They conducted us to the Commander's house, where we were received by his lady with great civility, and found tea and other refreshments prepared for us. After the first compliments were

1779.
May.

1779.
May.

over, Mr. Webber was desired to acquaint the Major with the object of our journey, with our want of naval stores, flour, and fresh provisions, and other necessaries for the ships crews; and at the same time to assure him, that we were sensible, from what we had already seen of the condition of the country about Awatka Bay, we could not expect much assistance from him in that quarter; that the impossibility of sending heavy stores across the peninsula, during the present season of the year, was but too apparent, from the difficulties we had met with in our journey; and that, long before any material change could take place, we should be under the necessity of proceeding on our voyage. We were here interrupted by the Commander, who observed, that we did not yet know what they were capable of doing; that, at least, it was not his business to think of the difficulties of supplying our wants, but only to learn what were the articles we stood in need of, and the longest time we could allow him, for procuring them. After expressing our sense of his obliging disposition, we gave him a list of the naval stores, the number of cattle, and the quantity of flour, we were directed to purchase, and told him, that we purposed recommencing our voyage about the 5th of June.

Our conversation afterward turned upon different subjects; and it will naturally be supposed, that our inquiries were principally directed to the obtaining some information respecting our own country. Having now been absent three years, we had flattered ourselves with the certainty of receiving intelligence from Major Behm, which could not fail of being interesting; and I cannot express the disappointment we felt, on finding, that he had no news to communicate

nicate of a much later date than that of our departure from England.

1779.
May.

About seven o'clock, the Commander, conceiving we might be fatigued with our journey, and desirous of taking some repose, begged he might conduct us to our lodgings. It was in vain that we protested against a compliment which we had certainly no title to expect, but that of being strangers; a circumstance which seemed, in the opinion of this generous Livonian, to counterbalance every other consideration. In our way, we passed by two guard-houses, where the men were turned out under arms, in compliment to Captain Gore; and were afterward brought to a very neat and decent house, which the Major gave us to understand was to be our residence, during our stay. Two sentinels were posted at the door; and in a house adjoining, there was a serjeant's guard. Having shewn us into our apartments, the Major took his leave, with a promise to see us the next day; and we were left to find out, at our leisure, all the conveniencies that he had most amply provided for us. A soldier, called a *putproperfckack*, whose rank is between that of a serjeant and corporal, along with our fellow-traveller Port, were appointed to be our male domestics; besides whom, there was a house-keeper and a cook, who had orders to obey Port's directions in dressing us a supper, according to our own mode of cookery. We received many civil messages, in the course of the evening, from the principal people of the town, purporting, that they would not add to our fatigues, by paying their respects to us at that time, but would wait on us in the morning. Such well-supported politeness and attention in a country so desolate and uncultivated, formed a contrast exceedingly favourable to its inhabitants; and to finish the piece as it began, at sun-set the

1779.
May.

serjeant came with the report of his guard to Captain Gore.

Thursday 13. Early in the morning, we received the compliments of the Commander, of Captain Shmaleff, and of the principal inhabitants of the town, who all honoured us with visits soon after. The two first having sent for Port, after we were gone to rest, and inquired of him, what articles we seemed to be most in want of on board the ships; we found them prepared to insist on our sharing with the garrison under their command, in what little stock of provisions they had remaining. At the same time they lamented, that we had arrived at a season of the year, when there was always the greatest scarcity of every thing amongst them; the floops not being yet arrived, with their annual supply, from Okotsk.

We agreed to accept the liberality of these hospitable strangers, with the best grace we could; but on condition, that we might be made acquainted with the price of the articles we were to be supplied with; and that Captain Clerke should give bills to the amount, upon the Victualling Office in London. This the Major positively refused; and whenever it was afterward urged, stopped us short, by telling us, he was certain, that he could not oblige his Mistress more, than in giving every assistance in his power to her good friends and allies the English; and that it would be a particular satisfaction to her, to hear, that in so remote a part of the world, her dominions had afforded any relief to ships engaged in such services as ours; that he could not therefore act so contrary to the character of his Empress, as to accept of any bills; but that, to accommodate the matter, he would take a bare attestation of the particulars, with
which

which we might be furnished; and that this he should transmit to his Court, as a certificate of having performed his duty. I shall leave, (he continued) to the two Courts, all farther acknowledgments; but cannot consent to accept any thing of the kind alluded to.

1779.
May.

When this matter was adjusted, he began to inquire about our private wants; saying, he should consider himself as ill used, if we had any dealings with the merchants, or applied to any other person except himself.

In return for such singular generosity, we had little to bestow but our admiration and our thanks. Fortunately, however, Captain Clerke had sent by me a set of prints and maps, belonging to the last voyage of Captain Cook, which he desired me to present in his name to the Commander; who being an enthusiast in every thing relating to discoveries, received it with a satisfaction which shewed, that, though a trifle, nothing could have been more acceptable. Captain Clerke had likewise intrusted me with a discretionary power of shewing him a chart of the discoveries made in the present voyage; and as I judged, that a person in his situation, and of his turn of mind, would be exceedingly gratified by a communication of this sort, though, out of delicacy, he had forbore to ask more than a few general questions on the subject, I made no scruple to repose in him a confidence, of which his whole conduct shewed him to be deserving.

I had the pleasure to find, that he felt this compliment as I hoped he would, and was much struck at seeing, in one view, the whole of that coast, as well on the side of Asia as on that of America, of which his countrymen had been so many

1779.
May.

years employed in acquiring a partial and imperfect knowledge*.

Excepting this mark of confidence, and the set of prints I have already mentioned, we had brought nothing with us that was in the least worth his acceptance; for it scarce deserves noticing, that I prevailed on his son, a young boy, to accept of a silver watch I happened to have about me; and I made his little daughter very happy with two pair of ear-rings, of French paste. Besides these trifles, I left with Captain Shmaleff the thermometer I had used on my journey; and he promised me, to keep an exact register of the temperature of the air for one year, and to transmit it to Mr. Muller, with whom he had the pleasure of being acquainted.

We dined this day at the Commander's, who, studious on every occasion to gratify our curiosity, had, besides a number of dishes dressed in our own way, prepared a great variety of others, after the Russian and Kamtschadale manner. The afternoon was employed in taking a view of the town, and the adjacent country. Bolcheretk is situated in a low swampy plain, that extends to the sea of Okotsk, being about forty miles long, and of a considerable breadth. It

* On this occasion, Major Behm permitted us to examine all the maps and charts that were in his possession. Those relating to the peninsula of the Tschutski, were made in conformity to the information collected by Plenishner, between the years 1760 and 1770. As the charts of Plenishner were afterward made use of, according to Mr. Coxe, in the compilation of the General Map of Russia, published by the Academy in 1776, it may be necessary to observe, that we found them exceedingly erroneous; and that the compilers of the General Map seem to have been led into some mistakes on his authority. Those, in which the islands on the coast of America were laid down, we found to contain nothing new, and to be much less accurate than those we saw at Oonalashka.

lies on the North side of the Bolchoi-reka (or great river), between the mouth of the Gottsofka and the Bistraia, which here empty themselves into this river; and the peninsula, on which it stands, has been separated from the continent by a large canal, the work of the present Commander; which has not only added much to its strength as a fortress, but has made it much less liable, than it was before, to inundations. Below the town, the river is from six to eight feet deep, and about a quarter of a mile broad. It empties itself into the sea of Okotsk, at the distance of twenty-two miles; where, according to Krasheninicoff, it is capable of admitting vessels of a considerable size. There is no corn, of any species, cultivated in this part of the country; and Major Behm informed me, that his was the only garden that had yet been planted. The ground was, for the most part, covered with snow; that which was free from it appeared full of small hillocks, of a black turfy nature. I saw about twenty or thirty cows; and the Major had six stout horses. These, and their dogs, are the only tame animals they possess; the necessity they are under, in the present state of the country, of keeping great numbers of the latter, making it impossible to bring up any cattle, that are not in size and strength a match for them. For, during the summer season, their dogs are entirely let loose, and left to provide for themselves; which makes them so exceedingly ravenous, that they will sometimes even attack the bullocks.

1779.
May.

The houses in Bolcheretsk are all of one fashion, being built of logs, and thatched. That of the Commander is much larger than the rest, consisting of three rooms of a considerable size, neatly papered, and which might have been reckoned handsome, if the *talc* with which the win-

dows

1779.
May.

dows were covered, had not given them a poor and disagreeable appearance. The town consists of several rows of low buildings, each consisting of five or six dwellings, connected together, with a long common passage running the length of them; on one side of which is the kitchen and store-house; and on the other the dwelling apartments. Besides these, are barracks for the Russian soldiers and Cossacks; a well looking church; and a court-room; and at the end of the town a great number of *Balagans*, belonging to the Kamtschadales. The inhabitants, taken all together, amount to between five and six hundred. In the evening, the Major gave a handsome entertainment; to which the principal people of the town, of both sexes, were invited.

Friday 14.

The next morning we applied privately to the merchant Fedositch, to purchase some tobacco for the sailors, who had now been upward of a twelvemonth without this favourite commodity. However, this, like all our other transactions of the same kind, came immediately to the Major's knowledge; and we were soon after surpris'd to find, in our house, four bags of tobacco, weighing upward of a hundred pounds each, which he begged might be presented, in the name of himself, and the garrison under his command, to our sailors. At the same time, they had sent us twenty loaves of fine sugar, and as many pounds of tea, being articles they understood we were in great want of, which they begged to be indulged in presenting to the officers. Along with these, Madame Behm had also sent a present for Captain Clerke, consisting of fresh butter, honey, figs, rice, and some other little things of the same kind, attended with many wishes, that, in his infirm state of health, they might be of service to him. It was in vain we tried to oppose this profusion of bounty, which I was really anxious to restrain,
being

being convinced, that they were giving away, not a share, but almost the whole stock of the garrison. The constant answer the Major returned us, on those occasions, was, that we had suffered a great deal, and that we must needs be in distress. Indeed, the length of time we had been out, since we touched at any known port, appeared to them so very incredible, that it required the testimony of our maps, and other corroborating circumstances, to gain their belief. Amongst the latter was a very curious fact which Major Behm related to us this morning, and which, he said, but for our arrival, he should have been totally at a loss to account for.

1779.
May.

It is well known, that the Tschutski are the only people, of the North of Asia, who have maintained their independence, and resisted all the attempts that have been made by the Russians to reduce them. The last expedition against them was undertaken in the year 1750, and terminated, after various success, in the retreat of the Russian forces, and the loss of the commanding officer. Since that time, the Russians had removed their frontier fortresses from the Anadyr to the Ingiga, a river that empties itself into the Northern extremity of the sea of Okotsk, and gives its name to a gulf, situated to the West of that of Penshinsk. From this fort, Major Behm had received dispatches the day of our arrival at Bolcheretzk, containing intelligence, that a tribe, or party, of the Tschutski, had arrived at that place with propositions of friendship, and a voluntary offer of tribute; that on inquiring into the cause of this unexpected alteration in their sentiments, they had informed his people, that toward the latter end of the last summer they had been visited by two very large Russian boats; that they had been

1779.
May.

treated by the people, who were in them, with the greatest kindness, and had entered into a league of friendship and amity with them; and that, relying on this friendly disposition, they were now come to the Russian fort, in order to settle a treaty, on such terms as might be acceptable to both nations. This extraordinary history had occasioned much speculation, both at Ingiginsk and Bolcheretsk; and, had we not furnished them with a key to it, must have remained perfectly unintelligible. We felt no small satisfaction in having, though accidentally, shewn the Russians, in this instance, the only true way of collecting tribute, and extending their dominions; and in the hopes that the good understanding, which this event hath given rise to, may rescue a brave people from the future invasions of such powerful neighbours.

We dined, this day, with Captain Shmaleff, and in the afternoon, in order to vary our amusements, he treated us with an exhibition of the Russian and Kamtschadale dancing. No description can convey an adequate idea of this rude and uncouth entertainment. The figure of the Russian dance was much like those of our hornpipes, and was danced either single, or by two or four persons at a time. Their steps were short and quick, with the feet scarce raised from the ground; the arms were fixed close to the sides; the body being all the while kept upright and immovable, excepting when the parties passed each other, at which time the hand was raised with a quick and awkward motion. But if the Russian dance was at the same time both unmeaning and ridiculous, the Kamtschadale joined to the latter quality the most whimsical idea that ever entered into any people's heads. It is intended to represent the awkward and clumsy

gestures

1779.
May.

gestures of the bear, which these people have frequent opportunities of observing in a great variety of situations. It will scarcely be expected that I should give a minute description of all the strange postures which were exhibited on these occasions; and I shall therefore only mention, that the body was always bowed, and the knees bent, whilst the arms were used in imitating the tricks and attitudes of that animal.

As our journey to Bolcheretsk had taken up more time than we expected, and we were told that our return might prove still more difficult and tedious, we were under the necessity of acquainting the commander, this evening, with our intention of setting out the next day. It was not without the utmost regret we thought of leaving our new acquaintance; and were therefore most agreeably surprised, when the Major told us, that if we could stay one day longer, he would accompany us. He had, he said, made up his dispatches, and resigned the command of Kamtschatka to his successor Captain Shmaleff, and had prepared every thing for his departure to Okotsk, which was to take place in a few days; but that he should feel great pleasure in putting off his journey a little longer, and returning with us to Saint Peter and Saint Paul's, that he might himself be a witness of every thing being done for us, that it was in their power to do.

In return for the few trifles I had given to the children of Major Behm, I was, next morning, the 15th, presented, by his little boy, with a most magnificent Kamtschadale dress, which shall be described in its proper place. It was of the kind worn by the principal *Toions* of the country, on occa-

Saturday 15.

1779.
May.

fions of great ceremony; and, as I was afterward told, by Fedofitsch, could not have been purchased for one hundred and twenty roubles. At the same time I had a present from his daughter, of a handsome fable muff.

We afterward dined with the Commander, who, in order to let us see as much of the manners of the inhabitants, and of the customs of the country, as our time would permit, invited the whole of the better sort of people in the village to his house this evening. All the women appeared very splendidly dressed, after the Kamtschadale fashion. The wives of Captain Shmaleff, and the other officers of the gar-rison, were prettily dressed, half in the Siberian, and half in the European mode; and Madame Behm, in order to make the stronger contrast, had unpacked part of her baggage, and put on a rich European dress. I was much struck with the richness and variety of the silks which the women wore, and the singularity of their habits. The whole was like some enchanted scene in the midst of the wildest and most dreary country in the world. Our entertainment again consisted of dancing and singing.

The next morning being fixed for our departure, we retired early to our lodgings, where the first things we saw were three travelling dresses, made after the fashion of the country, which the Major had provided for us, who came himself to our house soon after, to see all our things packed up, and properly taken care of. Indeed, what with his liberal presents, and the kindness of Captain Shmaleff, and many other individuals, who all begged to throw in their mite, together with the ample stock of provisions he had sent us for our journey, we had amassed no inconsiderable load of baggage.

Early in the morning, every thing being ready for our departure, we were invited to call on Madame Behm, in our way to the boats, and take our leave of her. Impressed, as our minds were, with sentiments of the warmest gratitude, by the attentive, benevolent, and generous treatment we had met with at Bolcheretsk, they were greatly heightened, by the affecting scene which presented itself to us, on leaving our lodgings. All the soldiers and Cossacks, belonging to the garrison, were drawn up on one hand, and the male inhabitants of the town, dressed out in their best clothes, on the other; and, as soon as we came out of the house, the whole body of the people joined in a melancholy song, which, the Major told us, it was usual, in that country, to sing on taking leave of their friends. In this manner we marched down to the Commander's house, preceded by the drums and music of the garrison, where we were received by Madame Behm, attended by the ladies, who were dressed in long silk cloaks, lined with very valuable furs of different colours, which made a most magnificent appearance. After partaking of some refreshment, that was prepared for us, we went down to the water-side, accompanied by the ladies, who now joined the song with the rest of the inhabitants; and as soon as we had taken leave of Madame Behm, and assured her of the grateful sense we should ever retain of the hospitality of Bolcheretsk, we found ourselves too much affected, not to hasten into the boats with all the expedition we could. When we put off, the whole company gave us three cheers, which we returned from the boat; and, as we were doubling a point, where for the last time we saw our friendly entertainers, they took their farewell in another cheer.

1779.
May.
Sunday 16.

We

1779.
May.

Monday 17.

Wednes. 19.

Thursday 20.

Friday 21.

We found the stream, on our return, so exceedingly rapid that notwithstanding the Cossacks and Kamtschadales used their utmost exertions, we did not reach the first village, Opatchin, till the evening of the 17th, which was at the rate of about twenty miles a day. We got to Natcheequin on the 19th; and, on the 20th, we crossed the plain to Karatchin. We found the road much better than when we had passed it before, there having been a smart frost on the night of the 19th. On the 21st, we proceeded down the Awatka River; and, before it was dark, got over the shoals which lie at the entrance of the bay. During the whole course of our journey, we were much pleased with the great goodwill with which the *Toions*, and their Kamtschadales, afforded us their assistance, at the different *ostrogs* through which we passed; and I could not but observe the pleasure that appeared in their countenances, on seeing the Major, and their strong expressions of sorrow, on hearing he was so soon going to leave them.

We had dispatched a messenger to Captain Clerke, from Bolcheretsk, with an account of our reception, and of the Major's intention of returning with us; at the same time, apprizing him of the day he might probably expect to see us. We were therefore very well pleased to observe, as we approached the harbour, all the boats of the two ships coming toward us, the men clean, and the officers as well dressed as the scarcity of our clothing would permit. The Major was much struck at the robust and healthy appearance of the boats crews, and still more at seeing most of them without any other covering than a shirt and trowsers, although at the very moment it actually snowed.

As

As Major Behm had expressed his intentions of visiting the ships before he landed, as soon as we arrived off the town, I desired to receive his commands; when remarking, that from the account we had given of the very bad state of Captain Clerke's health, it might be imprudent to disturb him at so late an hour (it being now past nine o'clock), he thought it, he said, most adviseable to remain that night on shore. Accordingly, after attending him to the serjeant's house, I took my leave, for the present, and went on board to acquaint Captain Clerke with my proceedings at Bolcheretsk. It was with the utmost concern I found, that in the fortnight we had been absent, this excellent officer was much altered for the worse, instead of reaping that advantage we flattered ourselves he might, from the repose of the harbour, and the milk and vegetable diet with which he was supplied.

1779.
May.

As soon as I had dispatched this business, I returned to the Major, and the next morning conducted him to the ships; where, on his arrival, he was saluted with thirteen guns, and received with every other mark of distinction, that it was in our power to pay him. He was attended by the Commander of one of the Russian galliots, the master of a sloop that lay in the harbour, two merchants from Bolcheretsk, and the priest of the neighbouring village of Paratounca, for whom he appeared to entertain the highest respect, and whom I shall hereafter have occasion to mention, on account of his great kindness to Captain Clerke. Saturday 22.

After visiting the Captain, and taking a view of both the ships, he returned to dinner on board the Resolution; and, in the afternoon, the various curiosities we had collected in the course of our voyage, were shewn him, and a complete
assortment

1799.
May.

assortment of every article presented to him by Captain Clerke. On this occasion I must not pass over an instance of great generosity and gratitude in the sailors of both ships; who, when they were told of the handsome present of tobacco that was made them by the Major, desired, entirely of their own accord, that their grog might be stopped, and their allowance of spirits presented, on their part, to the garrison of Bolcheretsk, as they said they had reason to conclude that brandy was scarce in the country, and would be very acceptable to them, since the soldiers on shore had offered four roubles a bottle for it. We, who knew how much the sailors always felt, whenever their allowance of grog was stopped, which was generally done in warm weather, that they might have it in a greater proportion in cold, and that this offer would deprive them of it during the inclement season we had to expect in our next expedition to the North, could not but admire so extraordinary a sacrifice; and that they might not suffer by it, Captain Clerke, and the rest of the officers substituted in the room of the very small quantity the Major could be prevailed on to accept, the same quantity of rum. This, with a dozen or two of Cape wine, for Madame Behm, and such other little presents as were in our power to bestow, were accepted in the most obliging manner. The next morning the tobacco was divided between the crews of the two ships, three pounds being allotted to every man that chewed or smoked tobacco, and one pound to those that did not.

I have before mentioned, that Major Behm had resigned the command of Kamtschatka, and intended to set out in a short time for Petersburg; and he now offered to charge himself with any dispatches we might trust to his care. This was an opportunity not to be neglected; and accordingly Captain

rain Clerke acquainted him, that he would take the liberty of sending by him some papers relating to our voyage, to be delivered to our Ambassador at the Russian court. Our first intentions were to send only a small journal of our proceedings; but afterward, Captain Clerke being persuaded that the whole account of our discoveries might safely be trusted to a person who had given such striking proofs both of his public and private virtues; and considering that we had a very hazardous part of the voyage still to undertake, determined to send, by him, the whole of the journal of our late Commander, with that part of his own, which completed the period from Captain Cook's death, till our arrival at Kamtschatka; together with a chart of all our discoveries. Mr. Bayly, and myself, thought it also proper to send a general account of our proceedings to the board of longitude; by which precautions, if any misfortune had afterward befallen us, the Admiralty would have been in possession of a complete history of the principal facts of our voyage. It was also determined, that a smaller packet should be sent by an express from Okotsk, which, the Major said, if he was fortunate in his passage to that port, would reach Petersburg by December; and that he himself should be there in February or March.

1779.
May.

During the three following days, the Major was entertained alternately in the two ships, in the best manner we were able. On the 25th, he took his leave, and was saluted with thirteen guns; and the sailors, at their own desire, gave him three cheers. The next morning, Mr. Webber, and myself, attended him a few miles up the Awatska River, where we met the Russian priest, his wife and children, who were waiting to take the last farewell of their commander.

Thursday 25.

Wednes. 26.

1779.
May.

It was hard to say, whether the good priest and his family, or ourselves, were most affected on taking our leave of Major Behm. Short as our acquaintance had been, his noble and disinterested conduct had inspired us with the highest respect and esteem for him; and we could not part with a person to whom we were under such obligations, and whom we had little prospect of ever seeing again, without feeling the most tender concern. The intrinsic value of the private presents we received from him, exclusive of the stores which might be carried to a public account, must have amounted, according to the current price of articles in that country, to upward of two hundred pounds. But this generosity, extraordinary as it must appear in itself, was exceeded by the delicacy with which all his favours were conferred, and the artful manner in which he endeavoured to prevent our feeling the weight of obligations, which he knew we had no means of requiting. If we go a step further, and consider him as supporting a public character, and maintaining the honour of a great Sovereign, we shall find a still higher subject of admiration, in the just and enlarged sentiments by which he was actuated. "The service in which you are employed," he would often say, "is for the general advantage of mankind, and therefore gives you a right, not merely to the offices of humanity, but to the privileges of citizens, in whatever country you may be thrown. I am sure I am acting agreeably to the wishes of my Mistress, in affording you all the relief in our power; and I cannot forget either her character, or my own honour, so much, as to barter for the performance of a duty." At other times, he would tell us, that he was particularly desirous of setting a good example to the Kamischadales, who, he said, were but just emerging from
a state

a state of barbarism; that they looked up to the Russians as their patterns in every thing; and that he had hopes they might, in future, look upon it as a duty incumbent upon them to assist strangers to the utmost of their power, and believe, that such was the universal practice of civilized nations. To all this must be added, that, after having relieved, to the utmost of his abilities, all our present distresses, he shewed himself not much less mindful of our future wants; and, as he supposed it more than probable we should not discover the passage we were in search of, and therefore should return to Kamtschatka in the fall of the year, he made Captain Clerke give him a list of what cordage and flour we should want, and promised they should be sent from Okotsk, and wait our arrival. For the same purpose, he gave Captain Clerke a paper, enjoining all the subjects of the Empress, whom we might happen to meet, to give us every assistance in their power.

1777.
May.

C H A P. III.

Continuation of Transactions in the Harbour of St. Peter and St. Paul.—Abundance of Fish.—Death of a Seaman belonging to the Resolution.—The Russian Hospital put under the Care of the Ship's Surgeons.—Supply of Flour and Cattle.—Celebration of the King's Birth-day.—Difficulties in sailing out of the Bay.—Eruption of a Volcano.—Steer to the Northward.—Cheepoonskoi Nofs.—Errors of the Russian Charts.—Kamtshatskoi Nofs.—Olutoriskoi Nofs.—Tschukotskoi Nofs.—Island of St. Laurence.—View, from the same Point, of the Coasts of Asia and America, and the Islands of St. Diomedé.—Various Attempts to get to the North, between the two Continents.—Obstructed by impenetrable Ice.—Sea-horses and white Bears killed.—Captain Clerke's Determination, and future Designs.

1779.
May.

Friday 7.

HAVING concluded the last chapter with an account of our return from Bolcheretsk, accompanied by Major Behm, the Commander of Kamtschatka, and of his departure; I shall proceed to relate the transactions that passed in the harbour of St. Peter and St. Paul during our absence. On the 7th of May, soon after we had left the bay, a large piece of ice drove across the cut-water of the Resolution, and brought home the small bower anchor. This obliged them to weigh the other anchor, and moor again. The
carpenters,

carpenters, who were employed in stopping the leak, were obliged to take off a great part of the sheathing from the bows, and found many of the trunnels so very loose and rotten, as to be easily drawn out with the fingers.

1779.
May.

On the 11th, they had heavy gales from the North East, Tuesday 11. which obliged both the ships to strike yards and topmasts; but in the afternoon the weather being more moderate, and the ice having drifted away as far as the mouth of the harbour of St. Peter and St. Paul, they warped close to the shore for the greater convenience of watering and wooding, and again moored as before; the town bearing North half West, half a mile distant, and the mouth of the bay, shut in by the Southernmost point of Rakowina harbour, South.

The next day a party was sent on shore to cut wood, but made little progress on account of the snow, which still covered the ground. A convenient spot was cleared away abreast of the ships, where there was a fine run of water; and a tent being erected for the cooper, the empty casks were landed, and the sail-makers sent on shore. Wednesday 12.

On the 15th, the beach being clear of ice, the people were sent to haul the seine, and caught an abundant supply of fine flat fish for both the ships companies. Indeed, from this time, during the whole of our stay in the harbour, we were absolutely overpowered with the quantities of fish which came in from every quarter. The *Tobions*, both of this town, and of Paratounca, a village in the neighbourhood, had received orders from Major Behm to employ all the Kamtschadales in our service; so that we frequently could not take into the ships the presents that were sent us. They consisted, in general, of flat fish, cod, trout, and herring. These last, which were in their full perfection, and of a delicious

1779.
May.

delicious flavour, were exceedingly abundant in this bay. The Discovery's people surrounded, at one time, so great a quantity in their seine, that they were obliged to throw a vast number out, lest the net should be broken to pieces; and the cargo they landed was afterward so plentiful, that, besides a sufficient store for immediate use, they filled as many casks as they could spare for salting; and, after sending to the Resolution a sufficient quantity for the same purpose, they left several bushels behind on the beach.

The snow now began to disappear very rapidly, and abundance of wild garlic, celery, and nettle tops were gathered for the use of the crews; which being boiled with wheat and portable soup, made them a wholesome and comfortable breakfast; and with this they were supplied every morning. The birch-trees were also tapped, and the sweet juice, which they yielded in great quantities, was constantly mixed with the men's allowance of brandy.

Sunday 16.

The next day, a small bullock, which had been procured for the ships companies by the serjeant, was killed; and weighed two hundred and seventy-two pounds. It was served out to both crews for their Sunday's dinner, being the first piece of fresh beef they had tasted since our departure from the Cape of Good Hope in December 1776, a period of near two years and a half.

This evening died John Macintosh, the carpenter's mate, after having laboured under a dysentery ever since our departure from the Sandwich Islands: he was a very hard working quiet man, and much regretted by his mess-mates. He was the fourth person we lost by sickness during the voyage; but the first who could be said, from his age, and the constitutional habits of his body, to have had, on our setting

setting out, an equal chance with the rest of his comrades: Watman, we supposed to be about sixty years of age; and Roberts, and Mr. Anderson, from the decay, which had evidently commenced before we left England, could not, in all probability, under any circumstances, have lived a greater length of time than they did.

1779.
May.

I have already mentioned, that Captain Clerke's health continued daily to decline, notwithstanding the salutary change of diet, which the country of Kamtschatka afforded him. The priest of Paratounca, as soon as he heard of the infirm state he was in, supplied him every day with bread, milk, fresh butter, and fowls, though his house was sixteen miles from the harbour where we lay.

On our first arrival, we found the Russian hospital, which is near the town of St. Peter and St. Paul, in a condition truly deplorable. All the soldiers were, more or less, affected by the scurvy, and a great many in the last stage of that disorder. The rest of the Russian inhabitants were also in the same condition; and we particularly remarked, that our friend the serjeant, by making too free with the spirits we gave him, had brought on himself, in the course of a few days, some of the most alarming symptoms of that malady. In this lamentable state, Captain Clerke put them all under the care of our surgeons, and ordered a supply of four krout, and malt, for wort, to be furnished for their use. It was astonishing to observe the alteration in the figures of almost every person we met on our return from Bolcheretsk; and I was informed, by our surgeons, that they attributed their speedy recovery principally to the effects of the sweet wort.

On

1779.
June.

Tuesday 1.

On the 1st of June we got on board two hundred and fifty poods, or nine thousand pound weight of rye flour, with which we were supplied from the stores of St. Peter and St. Paul's; and the Discovery had a proportional quantity. The men were immediately put on full allowance of bread, which they had not been indulged in since our leaving the Cape of Good Hope. The same day, our watering was completed, having got on board sixty-five tons.

Friday 4.

On the 4th, we had fresh breezes, and hard rain, which disappointed us in our design of dressing the ships, and obliged us to content ourselves with firing twenty-one guns, in honour of the day, and celebrating it in other respects in the best manner we were able. Port, who was left with us on account of his skill in languages, behaved himself with so much modesty and discretion, that, as soon as his master was gone, he was no longer Jean Port, but Monsieur Port, the interpreter; and partook, as well as the serjeant (in his capacity of commander of the place), of the entertainment of the day. Our worthy friend, the priest of Paratounca, having got intelligence of its being our king's birth-day, gave also a sumptuous feast; at which some of our gentlemen were present, who seemed highly delighted with their entertainment, which consisted of abundance of good eating and drinking, together with dancing.

Sunday 6.

On the 6th, twenty head of cattle were sent us by the Commander's orders from the Verchnei *ostrog*, which is situated on the river Kamtschatka, at the distance of near a hundred miles from this place, in a direct line. They were of a moderate size; and, notwithstanding the Kamtschadales had been seventeen days in driving them down to the harbour, arrived in good condition. The four following days

were employed in making ready for sea; and, on the 11th, at two in the morning, we began to unmoor; but, before we had got one anchor up, it blew so strong a gale from the North East, that we kept fast, and moored again; conjecturing, from the position of the entrance of the bay, that the current of wind would set up the channel. Accordingly, the pinnace being sent out to examine the passage, returned with an account, that the wind blew strong from the South East, with a great swell, setting into the bay, which would have made any attempt to get to sea very hazardous.

1779.
June.
Friday 11.

Our friend Port now took his leave of us, and carried with him the box with our journals, which was to go by the Major, and the packet that was to be sent express. On the 12th, the weather being moderate, we began to unmoor again; but, after breaking the messenger, and reeving a running purchase with a six inch hawser, which also broke three times, we were obliged, at last, to heave a strain at low water, and wait for the flowing of the tide to raise the anchor. This project succeeded; but not without damaging the cable in the wake of the hawse. At three, we weighed the best bower, and set sail; and, at eight, having little wind, and the tide making against us, we dropped anchor again in ten fathoms, off the mouth of Rakowina harbour; the *ostrog* bearing North by East half East, two miles and a half distant; the needle rocks on the East side of the passage South South East half East; and the high rock, on the West side of the passage, South.

Saturday 12.

On the 13th, at four in the morning, we got under way with the ebb tide; and, there being a dead calm, the boats were sent ahead to tow the ships. At ten, the wind springing up from the South East by South, and the tide

Sunday 13.

1779.
June.

having turned, we were again obliged to drop anchor in seven fathoms; the Three Needle Rocks bearing South half East; and the *ofstrog* North half East, at the distance of one mile from the nearest land. After dinner, I went, with Captain Gore, on shore on the East side of the passage, where we saw, in two different places, the remains of extensive villages; and, on the side of the hill, an old ruined parapet, with four or five embrasures. It commanded the passage up the mouth of the bay; and, in Beering's time, as he himself mentions, had guns mounted on it. Near this place, were the ruins of some caverns under ground, which we supposed to have been magazines.

Monday 14.

At six in the afternoon we weighed with the ebb tide, and turned to windward; but, at eight, a thick fog arising, we were obliged to bring to, as our soundings could not afford us a sufficient direction for steering between several sunk rocks, which lie on each side of the passage we had to make. In the morning of the 14th, the fog clearing away, we weighed as soon as the tide began to ebb; and, having little wind, sent the boats ahead to tow; but, at ten o'clock, both the wind and tide set in so strong from the sea, that we were again obliged to drop anchor in thirteen fathoms, the high rock bearing West one quarter South, distant three quarters of a mile. We remained fast for the rest of the day, the wind blowing fresh into the mouth of the bay; and, toward evening, the weather had a very unusual appearance, being exceedingly dark and cloudy, with an unsettled shifting wind.

Tuesday 15.

Before day-light, on the 15th, we were surprised with a rumbling noise, resembling distant hollow thunder; and, when the day broke, we found the decks and sides of the

ships

ships covered with a fine dust like emery, near an inch thick. The air, at the same time, continued loaded and darkened with this substance; and, toward the *volcano* mountain, situated to the North of the harbour, it was so thick and black, that we could not distinguish the body of the hill. About twelve o'clock, and, during the afternoon, the explosions became louder, and were followed by showers of cinders, which were, in general, about the size of peas; though many were picked up from the deck larger than a hazel nut. Along with the cinders fell several small stones, which had undergone no change from the action of fire. In the evening we had dreadful thunder and lightning, which, with the darkness of the atmosphere, and the sulphureous smell of the air, produced altogether a most awful and terrifying effect. We were, at this time, about eight leagues from the foot of the mountain.

1779.
June.

On the 16th, at day-light, we again weighed anchor, and stood out of the bay; but the ebb tide setting across the passage upon the Eastern shore, and the wind falling, we were driven very near the Three Needle Rocks, which lie on that side of the entrance, and obliged to hoist out the boats, in order to tow the ships clear of them. At noon we were two leagues from the land, and had soundings with forty-three fathoms of line, over a bottom of small stones, of the same kind with those which fell on our decks, after the eruption of the *volcano*; but whether they had been left there by the last, or by some former eruptions, we were not able to determine. Wednes. 16.

The aspect of the country was now very different from what it had been on our first arrival. The snow, excepting what remained on the tops of some very high mountains, had

1779.
June.

disappeared; and the sides of the hills, which, in many parts, were well wooded, were covered with a beautiful verdure.

As it was Captain Clerke's intention to keep as much in sight of the coast of Kamtschatka as the weather would permit, in order to determine its position, we continued steering to the North North East, with light and variable winds, till the 18th. The *volcano* was still seen throwing up immense volumes of smoke; and we had no soundings with one hundred and fifty fathoms, at the distance of four leagues from the shore.

Friday 18.

On the 18th, the wind freshening from the South, the weather became so thick and hazy, as to make it imprudent to attempt any longer to keep in sight of the land. But that we might be ready to resume our survey, whenever the fogs should disperse, we ran on in the direction of the coast, as laid down in the Russian charts, and fired signal guns for the Discovery to steer the same course. At eleven o'clock, just before we lost sight of the land, Cheeponskoi Nofs, so called by the Russians (a description of which, as well as the coast between it and Awatska Bay, will be given hereafter), bore North North East, distant seven or eight leagues.

Sunday 20.

On the 20th, at three in the morning, the weather having cleared up, we stood in toward the land; and in an hour's time saw it ahead, extending from North West to North North East, distant about five leagues. The North part we took to be Kronotskoi Nofs; its position in the Russian charts agreeing nearly with our reckoning as to its latitude, which was $54^{\circ} 42'$; but, in longitude, we differed from them considerably, they placing it $1^{\circ} 48'$ East of Awatska; whereas,
our

our reckoning, corrected by the time-keepers and lunar observations, makes it $3^{\circ} 34'$ Eastward of that place, or $162^{\circ} 17'$ East from Greenwich. The land about this cape is very high, and the inland mountains were still covered with snow. The shore breaks off in steep cliffs, and the coast is without any appearance of inlets or bays. We had not been long gratified with this sight of the land, when the wind freshened from the South West, and brought on a thick fog, which obliged us to stand off to the North East by East. The weather clearing up again at noon, we steered toward the land, expecting to fall in with Kamtschatskoi Nofs, and had sight of it at day-break of the 21st.

1779.
June.

Monday 21st.

The Southerly wind was soon after succeeded by a light breeze blowing off the land, which prevented our approaching the coast sufficiently near to describe its aspect, or ascertain, with accuracy, its direction. At noon our latitude, by observation, was $55^{\circ} 52'$, and longitude (deduced from a comparison of many lunar observations, taken near this time, with the time-keepers), $163^{\circ} 50'$; the extremities of the land bearing North West by West, three quarters West, and North by West three quarters West, the nearest part about eight leagues distant. At nine o'clock in the evening, having approached about two leagues nearer the coast, we found it formed a projecting peninsula, extending about twelve leagues in a direction nearly North and South. It is level, and of a moderate height, the Southern extremity terminating in a low sloping point; that to the North forming a steep bluff head; and between them, about four leagues to the Southward of the Northern Cape, there is a considerable break in the land. On each side of this break the land is quite low; beyond the opening rises a remarkable

1779-
June.

able faddle-like hill; and a chain of high mountains, covered with snow, ranges along the back of the whole peninsula.

As the coast runs in an even direction, we were at a great loss where to place Kamtschatzkoi Nofs, which, according to Muller, forms a projecting point about the middle of the peninsula, and which certainly does not exist; but I have since found, that, in the general map published by the academy of Petersburg in 1776, that name is given to the Southern cape. This was found, by several accurate observations, to be in latitude $56^{\circ} 3'$, longitude $163^{\circ} 20'$; the difference in longitude, from the Russian charts, being the same as at Kronotskoi Nofs. The variation of the compass at this time was 10° East. To the Southward of this peninsula the great river Kamtschatka falls into the sea.

As the season was too far advanced to admit of our making an accurate survey of the coast of Kamtschatka, it was Captain Clerke's plan, in our run to Beering's Straits, to determine principally the positions of the projecting points of the coast. We, therefore, directed our course across an extensive bay, laid down between Kamtschatzkoi Nofs and Olutorfkoi Nofs, intending to make the latter; which, according to the Russian geographers, terminates the peninsula called Kamtschatka, and becomes the Southern boundary of the Koriaki country.

Tuesday 22. On the 22d, we passed a dead whale, which emitted a horrid stench, perceivable at upward of a league's distance; it was covered with a great number of sea-birds, that were feasting on it.

Thursday 24. On the 24th, the wind, which had varied round the compass the three preceding days, fixed at South West, and brought

brought clear weather, with which we continued our course to the North East by North, across the bay, without any land in sight.

1779.
June.

This day we saw a great number of gulls, and were witnesses to the disgusting mode of feeding of the arctic gull, which has procured it the name of the parasite, and which, if the reader is not already acquainted with it, he will find in the note below*.

On the 25th, at one o'clock in the afternoon, being in latitude $59^{\circ} 12'$, longitude $168^{\circ} 35'$, the wind freshening from the same quarter, a thick fog succeeded; and this unfortunately just at the time we expected to see Olutoriskoi Nofs, which, if Muller places it right in latitude $59^{\circ} 30'$, and in longitude $167^{\circ} 36'$, could only have then been twelve leagues from us; at which distance, land of a moderate height might easily have been seen. But if the same error in longitude prevails here, which we have hitherto invariably found, it would have been much nearer us, even before the fog came on; and as we saw no appearance of land at that time, it must either have been very low, or there must be some mistake of latitude in Muller's account. We tried soundings, but had no ground with one hundred and sixty fathoms of line.

Friday 25.

The weather still thickening, and preventing a nearer approach to the land, at five we steered East by North, which is somewhat more Easterly than the Russian charts lay down the trending of the coast from Olutoriskoi Nofs. The next day, we had a fresh gale from the South West, which lasted

Saturday 26.

* This bird, which is somewhat larger than the common gull, pursues the latter kind whenever it meets them; the gull, after flying for some time, with loud screams, and evident marks of great terror, drops its dung, which its pursuer immediately darts at, and catches before it falls into the sea.

till.

1779.
June.
Sunday 27.

till the 27th at noon, when the fogs clearing away, we stood to the Northward, in order to make the land. The latitude at noon, by observation, was $59^{\circ} 49'$, longitude $175^{\circ} 43'$. Notwithstanding we saw shags in the forenoon, which are supposed never to go far from land, yet there was no appearance of it this day; but on the 28th, at six in the morning, we got sight of it to the North West. The coast shews itself in hills of a moderate height; but inland, others are seen to rise considerably. We could observe no wood, and the snow lying upon them in patches, gave the whole a very barren appearance. At nine, we were about ten miles from the shore, the Southern extremity bearing West by South, six leagues distant, beyond which the coast appeared to trend to the Westward. This point being in latitude $61^{\circ} 48'$, longitude $174^{\circ} 48'$, lies, according to the Russian charts, near the mouth of the river Opuka. At the same time, the Northern extreme bore North by West; between which and a hill bearing North West by West a quarter West, and at this distance appearing to us like an island, the coast seemed to bend to the Westward, and form a deep bay.

About eight miles from land, we perceived ourselves in a strong rippling; and being apprehensive of foul ground, we bore away to the North East, along the shore; notwithstanding, on heaving the lead, we found regular soundings of twenty-four fathoms, over a gravelly bottom; from whence we concluded, that this appearance was occasioned by a tide, at that time running to the Southward. At noon, the extremes of the land bearing West South West three-quarters West, and North North East three-quarters East, distant from the nearest shore four leagues, we were abreast of the low land, which we now perceived to join the two points, where we had before expected to find a deep bay. The coast bends
a little

a little to the Westward, and has a small inlet, which may probably be the mouth of some trifling stream. Our latitude, by observation, was $61^{\circ} 56'$, and longitude $175^{\circ} 43'$, and the variation of the compass $17^{\circ} 30'$ East.

1779.
June.

We continued, during the afternoon, to run along the shore, at the distance of four or five leagues, with a moderate Westerly breeze, carrying regular soundings from twenty-eight to thirty-six fathoms. The coast presented the same barren aspect as to the Southward; the hills rising considerably inland, but to what height, the clouds on their tops put it out of our power to determine. At eight in the evening, land was thought to have been seen to the East by North, on which we steered to the Southward of East; but it turned out to be only a fog bank. At midnight, the extreme point bearing North East a quarter East, we supposed it to be Saint Thadeus's Nofs; to the Southward of which, the land trends to the Westward, and forms a deep bight, wherein, according to the Russian charts, lies the river Katirka.

On the 29th, the weather was unsettled and variable, Tuesday 29.
with the wind from the North East. At noon of the 30th, Wednes. 30.
our latitude, by observation, was $61^{\circ} 48'$, and longitude $180^{\circ} 0'$; at which time Saint Thadeus's Nofs bore North North West, twenty-three leagues distant, and beyond it we observed the coast stretching almost directly North. The most Easterly point of the Nofs is in latitude $62^{\circ} 50'$, and longitude $179^{\circ} 0'$, being $3\frac{1}{2}^{\circ}$ more to the East, than what the Russians make it. The land about it must be of a considerable height from its being seen at so great a distance. During the two last days, we saw numbers of whales, large seals, and sea-horses; also gulls, sea-parrots, and albatrosses.

1779.
June.

trosses. We took the advantage of a little calm weather to try for fish, and caught abundance of fine cod. The depth of water from sixty-five to seventy-five fathoms.

July.
Thursday 1.

On the 1st of July at noon, Mr. Bligh having moored a small keg with the deep-sea lead, in seventy-five fathoms, found the ship made a course North by East, half a mile an hour. This he attributed to the effect of a long Southerly swell, and not to that of any current. The wind freshening from the South East toward evening, we shaped our course to the North East by East, for the point called in Beer-*ing's* chart, *Tschukotskoi Nofs*, which we had observed on the 4th of September last year, at the same time that we saw, to the South East, the island of Saint Laurence. This Cape, and Saint Thadeus's Nofs, form the North East and South West extremities of the large and deep Gulph of Anadir, into the bottom of which the river of that name empties itself, dividing, as it passes, the country of the Koriacs from that of the *Tschutski*.

Saturday 3.

On the 3d at noon, the latitude, by observation, was $63^{\circ} 33'$, and the longitude $186^{\circ} 45'$; half an hour after which we got sight of the *Tschukotskoi Nofs*, bearing North half West, thirteen or fourteen leagues distant, and at five in the afternoon saw the island of Saint Laurence, bearing East three-quarters North; and another island a little to the Eastward of it, which we supposed to be between Saint Laurence and Anderson's Island, about six leagues East South East of the former. As we had no certain accounts of this island, Captain Clerke was desirous of a nearer prospect, and immediately hauled the wind toward it; but, unfortunately, we were not able to weather the island of Saint Laurence,
and

and were therefore under the necessity of bearing up again, and passing them all to the leeward.

1779.
July.

We had a better opportunity of settling the longitude of the island Saint Laurence, when we last saw it, than now. But seeing it at that time but once, and to the Southward, we could only determine its latitude so far as we could judge of distances; whereas now the noon observations enabled us to ascertain it correctly, which is $63^{\circ} 47'$. Its longitude was found to be $188^{\circ} 15'$, as before. This island, if its boundaries were at this time within our view, is about three leagues in circuit. The North part may be seen at the distance of ten or twelve leagues; but as it falls in low land to the South East, the extent of which we could not see, some of us conjectured, that it might probably be joined to the land to the Eastward of it; this, however, the haziness of the weather prevented our ascertaining. These islands, as well as the land about the Tschukotkoi Nofs, were covered with snow, and presented us with a most dreary picture. At midnight, Saint Laurence bore South South East, five or six miles distant; and our depth of water was eighteen fathoms. We were accompanied by various kinds of sea fowl, and saw several small crested hawks.

The weather still continuing to thicken, we lost all sight of land till the 5th, when it appeared both to the North East and North West. Our latitude, by account, was, at this time, $65^{\circ} 24'$, longitude $189^{\circ} 14'$. As the islands of Saint Diomedé, which lie between the two continents in Bering's strait, were determined by us last year to be in latitude $65^{\circ} 48'$, we could not reconcile the land to the North East, with the situation of those islands. We therefore stood toward the land till three in the afternoon, when we were

Monday 5.

1779.
July.

within four miles of it, and finding it to be two islands, were pretty well satisfied of their being the same; but the weather still continuing hazy, to make sure of our situation, we stood over to the coast of Asia, till seven in the evening; at which time we were within two or three leagues of the East Cape of that continent.

This Cape is a high round head of land, extending four or five miles from North to South, forming a peninsula, and connected with the continent by a narrow neck of low land. Its shore is bold, and off its North part are three high, detached, spiral rocks. At this time it was covered with snow, and the beach surrounded with ice. We were now convinced, that we had been under the influence of a strong current, setting to the North, that had caused an error in our latitude at noon of twenty miles. In passing this strait the last year, we had experienced the same effect.

Being at length sure of our position, we held on to the North by East. At ten at night, the weather becoming clear, we had an opportunity of seeing, at the same moment, the remarkable peaked hill, near Cape Prince of Wales, on the coast of America, and the East Cape of Asia, with the two connecting islands of Saint Diomedé between them.

Tuesday 6. At noon on the 6th, the latitude, by account, was 67° North, and the longitude $191^{\circ} 6'$ East. Having already passed a considerable number of large masses of ice, and observed, that it still adhered in several places to the shore on the continent of Asia, we were not much surprized to fall in, at three in the afternoon, with an extensive body of it, stretching away to the Westward. This sight gave great discouragement to our hopes of advancing much farther Northward this year, than we had done the preceding.

Having

Having little wind in the afternoon, we hoisted out the boats in pursuit of the sea-horses, which were in great numbers on the detached pieces of ice; but they soon returned without success; these animals being exceedingly shy, and before they could come within gun-shot, always making their retreat into the water.

1779.
July.

At seven in the evening, we hoisted in the boats, and the wind freshening from the Southward, we stood on to the North East, with a view of exploring the continent of America, between the latitudes of 68° and 69° , which, owing to the foggy weather last year, we had not been able to examine. In this attempt we were again in part disappointed.

For, on the 7th, at six in the morning, we were stopped by a large field of ice, stretching from North West to South East; but soon after, the horizon becoming clear, we had sight of the coast of America, at about ten leagues distance; extending from North East by East to East, and lying, by observation, between the 68° and $68^{\circ} 20'$ of latitude. As the weather was clear, and the ice not high, we were enabled to see over a great extent of it. The whole presented a solid and compact surface, not in the smallest degree thawed; and appeared to us likewise to adhere to the land.

Wednes. 7.

The weather soon after changing to hazy, we saw no more of the land; and there not remaining a possibility of approaching nearer to it, we stood to the North North West, keeping the ice close on board, and got round its Western extremity by noon, when we found it trending nearly North. Our latitude at this time was, by account, $68^{\circ} 22'$, and longitude $192^{\circ} 34'$. We continued our course to the North North East, along the edge of the ice, during the remaining part of the day, passing through many loose pieces that

had

1779.
July.

had been broken off from the main body, and against which notwithstanding all our caution, the ships were driven with great violence. At eight o'clock in the evening, we passed some drift wood; and at midnight the wind shifted to the North West; the thermometer fell from 38° to 31° , and we had continued showers of snow and sleet.

Thursday 8.

On the 8th, at five in the morning, the wind coming still more to the Northward, we could no longer keep on the same tack, on account of the ice, but were obliged to stand to the Westward. At this time our soundings had decreased to nineteen fathoms, from which, on comparing it with our observations on the depth of water last year, we concluded, that we were not at a greater distance from the American shore than six or seven leagues; but our view was confined within a much shorter compass, by a violent fall of snow. At noon, the latitude, by account, was $69^{\circ} 21'$, longitude $192^{\circ} 42'$. At two in the afternoon, the weather cleared up, and we found ourselves close to an expanse of what appeared from the deck solid ice; but, from the mast-head, it was discovered to be composed of huge compact bodies, close and united toward the outer edge, but in the interior parts, several pieces were seen floating in vacant spaces of the water. It extended from North East by the North to West South West. We bore away by the edge of it, to the Southward, that we might get into clearer water; for the strong Northerly winds had drifted down such quantities of loose pieces, that we had been, for some time, surrounded by them, and could not avoid striking against several, notwithstanding we reefed the topsails, and stood under an easy sail.

Friday 9.

On the 9th, we had a fresh gale from the North North West, with heavy showers of snow and sleet. The thermo-

meter

1779.
July.

meter was, in the night-time, 28° , and at noon 30° . We continued to steer West South West, as before, keeping as near the large body of ice as we could, and had the misfortune to rub off some of the sheathing from the bows against the drift pieces, and to damage the cutwater. Indeed, the shocks we could not avoid receiving, were frequently so severe, as to be attended with considerable danger. At noon, the latitude, by account, was $69^{\circ} 12'$, and longitude $188^{\circ} 5'$. The variation, in the afternoon, was found to be $29^{\circ} 30'$ East.

As we had now sailed near forty leagues to the Westward, along the edge of the ice, without seeing any opening, or a clear sea to the Northward beyond it, and had therefore no prospect of advancing farther North for the present, Captain Clerke resolved to bear away to the South by East (the only quarter that was clear), and to wait till the season was more advanced, before he made any farther efforts to penetrate through the ice. The intermediate time he proposed to spend in examining the bay of St. Laurence, and the coast to the Southward of it; as a harbour so near, in case of future damage from the ice, would be very desirable. We also wished to pay another visit to our Tschutski friends; and, particularly, since the accounts we had heard of them from the Commander of Kamtschatka.

We therefore stood on to the Southward, till the noon of the 10th, at which time we passed great quantities of drift-ice, and the wind fell to a perfect calm. The latitude, by observation, was $68^{\circ} 1'$; longitude $188^{\circ} 30'$. We passed several whales in the forenoon; and, in the afternoon, hoisted out the boats, and sent them in pursuit of the sea-horses, which were in great numbers on the pieces of ice that surrounded

Saturday 10.

1779.
July.

rounded us. Our people were more successful than they had been before, returning with three large ones, and a young one; besides killing and wounding several others. The gentlemen who went on this party were witnesses of several remarkable instances of parental affection in those animals. On the approach of our boats toward the ice, they all took their cubs under their fins, and endeavoured to escape with them into the sea. Several, whose young were killed or wounded and left floating on the surface, rose again, and carried them down, sometimes just as our people were going to take them up into the boat; and might be traced bearing them to a great distance through the water, which was coloured with their blood: we afterward observed them bringing them, at times, above the surface, as if for air, and again diving under it with a dreadful bellowing. The female, in particular, whose young had been destroyed, and taken into the boat, became so enraged, that she attacked the cutter, and struck her two tusks through the bottom of it.

At eight in the evening, a breeze sprung up to the Eastward, with which we still continued our course to the Southward, and at twelve fell in with numerous large bodies of ice. We endeavoured to push through them with an easy sail, for fear of damaging the ship: and having got a little farther to the Southward, nothing was to be seen, but one compact field of ice, stretching to the South West, South East, and North East, as far as the eye could reach. This unexpected and formidable obstacle put an end to Captain Clerke's plan of visiting the Tschutski; for no space remained open, but back again to the Northward. Accordingly, at three in the morning of the 11th, we tacked, and stood

Sunday 11.

to

to that quarter. At noon, the latitude, by observation, was $67^{\circ} 49'$, and longitude $188^{\circ} 47'$.

1779.
July.

On the 12th, we had light winds, with thick hazy weather; and, on trying the current, we found it set to the North West, at the rate of half a knot an hour. We continued to steer Northward, with a moderate Southerly breeze, and fair weather, till the 13th, at ten in the forenoon, when we again found ourselves close in with a solid field of ice, to which we could see no limits from the mast head. This, at once, dashed all our hopes of penetrating farther; which had been considerably raised, by having now advanced near ten leagues through a space, which, on the 9th, we had found occupied by impenetrable ice. Our latitude, at this time, was $69^{\circ} 37'$; our position nearly in the mid channel between the two continents; and the field of ice extending from East North East, to West South West.

Monday 12.

Tuesday 13.

As there did not remain the smallest prospect of getting farther North in the part of the sea where we now were, Captain Clerke resolved to make one more, and final attempt on the American coast, for Baffin's Bay, since we had been able to advance the farthest on this side last year. Accordingly, we kept working, the remaining part of the day, to the windward, with a fresh Easterly breeze. We saw several fulmars and arctic gulls, and passed two trees, both appearing to have lain in the water a long time. The larger was about ten feet in length, and three in circumference, without either bark or branches, but with the roots remaining attached.

On the 14th, we stood on to the Eastward, with thick and foggy weather, our course being nearly parallel to that we steered the 8th and 9th, but six leagues more to the Northward.

Wednes. 14.

1779.
July.
Thursday 15.

ward. On the 15th, the wind freshened from the Westward, and having, in a great measure, dispersed the fog, we immediately stood to the Northward, that we might take a nearer view of the ice; and in an hour were close in with it, extending from North North West, to North East. We found it to be compact and solid; the outer parts were ragged, and of different heights; the interior surface was even; and, we judged, from eight to ten feet above the level of the sea. The weather becoming moderate for the remaining part of the day, we directed our course according to the trending of the ice, which in many parts formed deep bays.

Friday 16.

In the morning of the 16th, the wind freshened, and was attended with thick and frequent showers of snow. At eight in the forenoon, it blew a strong gale from the West South West, and brought us under double-reefed top-sails; when, the weather clearing a little, we found ourselves embayed; the ice having taken a sudden turn to the South East, and in one compact body surrounding us on all sides, except on the South quarter. We therefore hauled our wind to the Southward, being at this time in latitude $70^{\circ} 8'$ North, and in twenty-six fathoms water; and, as we supposed, about twenty-five leagues from the coast of America. The gale increasing, at four in the afternoon we close reefed the fore and main-top-sails, furled the mizen top-sail, and got the top-gallant-yards down upon deck. At eight, finding the depth of water had decreased to twenty-two fathoms, which we considered as a proof of our near approach to the American coast, we tacked and stood to the North. We had blowing weather, accompanied with snow, through the night; but next morning, it became clear and moderate; and, at eight in the forenoon, we got the top-gallant yards across,

Saturday 17.

across, and made sail with the wind still at West South West. At noon, we were in latitude, by observation, $69^{\circ} 55'$, longitude $194^{\circ} 30'$. Toward evening, the wind slackened, and at midnight it was a calm.

1779.
July.

Sunday 18.

On the 18th, at five in the morning, a light breeze sprung up from the East North East, with which we continued our course to the North, in order to regain the ice as soon as possible. We passed some small logs of drift-wood, and saw abundance of sea-parrots, and the small ice-birds, and likewise a number of whales. At noon, the latitude, by observation, was $70^{\circ} 26'$, and longitude $194^{\circ} 54'$; the depth of water twenty-three fathoms; the ice stretched from North to East North East, and was distant about three miles. At one in the afternoon, finding that we were close in with a firm united field of it, extending from West North West to East, we tacked, and, the wind coming round to the Westward, stood on to the Eastward, along its edge, till eleven at night. At that time a very thick fog coming on, and the water shoaling to nineteen fathoms, we hauled our wind to the South. The variation observed this day was $31^{\circ} 20'$ East. It is remarkable, that though we saw no sea-horses on the body of the ice, yet they were in herds, and in greater numbers on the detached fragments, than we had ever observed before. About nine in the evening, a white bear was seen swimming close by the Discovery; it afterward made to the ice, on which were also two others.

Monday 19.

On the 19th, at one in the morning, the weather clearing up, we again steered to the North East, till two, when we were a second time so completely embayed, that there was no opening left, but to the South; to which quarter we accordingly directed our course, returning through a remark-

1779.
July.

ably smooth water, and with very favourable weather, by the same way we had come in. We were never able to penetrate farther North than at this time, when our latitude was $70^{\circ} 33'$; and this was five leagues short of the point to which we advanced last season. We held on to the South South West, with light winds from the North West, by the edge of the main ice, which lay on our left hand, and stretched between us and the continent of America. Our latitude, by observation at noon, was $70^{\circ} 11'$, our longitude $196^{\circ} 15'$, and the depth of water sixteen fathoms. From this circumstance, we judged that the Icy Cape was now only at seven or eight leagues distance; but, though the weather was in general clear, it was at the same time hazy in the horizon; so that we could not expect to see it.

In the afternoon, we saw two white bears in the water, to which we immediately gave chase in the jolly boat, and had the good fortune to kill them both. The larger, which probably was the dam of the younger, being shot first, the other would not quit it, though it might easily have escaped on the ice, whilst the men were reloading, but remained swimming about, till, after being fired upon several times, it was shot dead.

The dimensions of the larger were as follow:

		Feet. Inches.	
From the snout to the end of the tail	-	7	2
From the snout to the shoulder-bone	-	2	3
Height of the shoulder	- - -	4	3
Circumference near the fore-legs	-	4	10
Breadth of the fore-paw	- - -	-	10
		lb.	
Weight of the four quarters	-	436	
Weight of the four quarters of the smallest		256	

On comparing the dimensions of this with Lord Mulgrave's white bear, they were found almost exactly the same, except in the circumference, where our's fell exceedingly short.

1779.
July.

These animals afforded us a few excellent meals of fresh meat. The flesh had indeed a strong fishy taste, but was, in every respect, infinitely superior to that of the sea-horse; which, nevertheless, our people were again persuaded, without much difficulty, to prefer to their salted provisions.

At six in the morning of the 20th, a thick fog coming on, we lost sight of the ice for two hours; but the weather clearing, we saw the main body again to the South South East, when we hauled our wind, which was Easterly, toward it, in the expectation of making the American coast to the South East, and which we effected at half past ten. At noon, the latitude, by account, was $69^{\circ} 33'$, and longitude $194^{\circ} 53'$, and the depth of water nineteen fathoms. The land extended from South by East, to South South West half West, distant eight or ten leagues, being the same we had seen last year; but it was now much more covered with snow than at that time; and, to all appearance, the ice adhered to the shore. We continued, in the afternoon, sailing through a sea of loose ice, and standing toward the land, as near as the wind, which was East South East, would admit. At eight, the wind lessening, there came on a thick fog; and, on perceiving a rippling in the water, we tried the current, which we found to set to the East North East, at the rate of a mile an hour, and therefore determined to steer, during the night, before the wind, in order to stem it, and to oppose the large fragments of loose ice, that were setting

1779.
July.

setting us on toward the land. The depth of the water, at midnight, was twenty fathoms.

Wednes. 21.

At eight in the morning of the 21st, the wind freshening, and the fog clearing away, we saw the American coast to the South East, at the distance of eight or ten leagues, and hauled in for it; but were stopped again by the ice, and obliged to bear away to the Westward, along the edge of it. At noon, the latitude, by account, was $69^{\circ} 34'$, and longitude 193° , and the depth of water twenty-four fathoms.

Thus, a connected, solid field of ice, rendering every effort we could make to a nearer approach to the land fruitless, and joining, as we judged, to it, we took a last farewell of a North East passage to Old England. I shall beg leave to give, in Captain Clerke's own words, the reasons of this his final determination, as well as of his future plans; and this the rather, as it is the last transaction his health permitted him to write down.

“ It is now impossible to proceed the least farther to the
 “ Northward upon this coast (America); and it is equally
 “ as improbable that this amazing mass of ice should be
 “ dissolved by the few remaining summer-weeks which will
 “ terminate this season; but it will continue, it is to be be-
 “ lieved, as it now is, an insurmountable barrier to every
 “ attempt we can possibly make. I, therefore, think it the
 “ best step that can be taken, for the good of the service, to
 “ trace the sea over to the Asiatic coast, and to try if I can find
 “ any opening, that will admit me farther North; if not, to
 “ see what more is to be done upon that coast; where I hope,
 “ yet cannot much flatter myself, to meet with better suc-
 “ cess; for the sea is now so choked with ice, that a pas-
 “ sage, I fear, is totally out of the question.”

C H A P. IV.

Fruitless Attempts to penetrate through the Ice to the North West.—Dangerous Situation of the Discovery.—Sea-horses killed.—Fresh Obstructions from the Ice.—Report of Damages received by the Discovery.—Captain Clerke's Determination to proceed to the Southward.—Joy of the Ship's Crews on that Occasion.—Pass Serdze Kamen.—Return through Beering's Straits.—Inquiry into the Extent of the North East Coast of Asia.—Reasons for rejecting Muller's Map of the Promontory of the Tschutski.—Reasons for believing the Coast does not reach a higher Latitude than $70\frac{1}{2}^{\circ}$ North.—General Observations on the Impracticability of a North East, or North West Passage from the Atlantic into the Pacific Ocean.—Comparative View of the Progress made in the Years 1778 and 1779.—Remarks on the Sea, and Sea-coasts, North of Beering's Straits.—History of the Voyage resumed.—Pass the Island of St. Laurence.—The Island of Mednoi.—Death of Captain Clerke.—Short Account of his Services.

CAPTAIN CLERKE having determined, for the reasons assigned at the conclusion of the last Chapter, to give up all farther attempts on the coast of America, and to make his last efforts, in search of a passage on the coast of the opposite

1779.
July.

1779.
July.
Wednes. 21.

posite continent, we continued, during the afternoon of the 21st of July, to steer to the West North West, through much loose ice. At ten at night, discovering the main body of it through the fog, right ahead, and almost close to us, and being unwilling to take a Southerly course, so long as we could possibly avoid it, we hauled our wind, which was Easterly, and stood to the Northward; but, in an hour after, the weather clearing up, and finding ourselves furrounded by a compact field of ice, on every side, except to the South South West, we tacked, and stood on in that direction, in order to get clear of it.

Thursday 22. At noon of the 22d, our latitude, by observation, was $69^{\circ} 30'$, and longitude $187^{\circ} 30'$. In the afternoon, we again came up with the ice, which extended to the North West and South West, and obliged us to continue our course to the Southward, in order to weather it.

It may be remarked, that since the 8th of this month, we had twice traversed this sea, in lines nearly parallel with the run we had just now made; that in the first of those traverses, we were not able to penetrate so far North, by eight or ten leagues, as in the second; and that in the last we had again found an united body of ice, generally about five leagues to the Southward of its position in the preceding run. As this proves that the large, compact fields of ice, which we saw were moveable, or diminishing; at the same time, it does not leave any well-founded expectation of advancing much farther in the most favourable seasons.

At seven in the evening, the weather being hazy, and no ice in sight, we bore away to the Westward; but, at half past eight, the fog dispersing, we found ourselves in the
midst

midst of loose ice, and close in with the main body; we therefore stood upon a wind, which was still Easterly, and kept beating to windward during the night, in hopes of weathering the loose pieces, which the freshness of the wind kept driving down upon us in such quantities, that we were in manifest danger of being blocked up by them.

1779.
July.

In the morning of the 23d, the clear water, in which we continued to stand to and fro, did not exceed a mile and a half, and was every instant lessening. At length, after using our utmost endeavours to clear the loose ice, we were driven to the necessity of forcing a passage to the Southward, which, at half past seven, we accomplished, but not without subjecting the ship to some very severe shocks. The Discovery was less successful. For, at eleven, when they had nigh got clear out, she became so entangled by several large pieces, that her way was stopped, and immediately dropping bodily to leeward, she fell, broadside foremost, on the edge of a considerable body of ice; and having, at the same time, an open sea to windward, the surf caused her to strike violently upon it. This mass at length either so far broke, or moved, as to set them at liberty to make another trial to escape; but, unfortunately, before the ship gathered way enough to be under command, she again fell to leeward on another fragment; and the swell making it unsafe to lie to windward, and finding no chance of getting clear, they pushed into a small opening, furled their sails, and made fast with ice-hooks.

Friday 23.

In this dangerous situation we saw them at noon, about three miles from us, bearing North West, a fresh gale from the South East driving more ice to the North West, and increasing the body that lay between us. Our latitude, by

1779.
July.

account, was $69^{\circ} 8'$, the longitude 187° , and the depth of water twenty-eight fathoms. To add to the gloomy apprehensions which began to force themselves on us, at half past four in the afternoon, the weather becoming thick and hazy, we lost sight of the Discovery; but, that we might be in a situation to afford her every assistance in our power, we kept standing on close by the edge of the ice. At six, the wind happily coming round to the North, gave us some hopes, that the ice might drift away and release her; and in that case, as it was uncertain in what condition she might come out, we kept firing a gun every half hour, in order to prevent a separation. Our apprehensions for her safety did not cease till nine, when we heard her guns in answer to ours; and soon after, being hailed by her, were informed, that upon the change of wind, the ice began to separate; and that, setting all their sails, they forced a passage through it. We learned farther, that whilst they were encompassed by it, they found the ship drift, with the main body, to the North East, at the rate of half a mile an hour. We were sorry to find, that the Discovery had rubbed off a great deal of the sheathing from the bows, and was become very leaky, from the strokes she had received when she fell upon the edge of the ice.

Saturday 24.

On the 24th, we had fresh breezes from South West, with hazy weather, and kept running to the South East till eleven in the forenoon, when a large body of loose ice, extending from North North East, round by the East, to South South East, and to which (though the weather was tolerably clear) we could see no end, again obstructed our course. We therefore kept working to windward, and at noon, our latitude, by observation, was $68^{\circ} 53'$, longitude 188° ; the variation of the compass $22^{\circ} 30'$ East. At four in the afternoon, it be-

came calm, and we hoisted out the boats in pursuit of the sea-horses, which were in prodigious herds on every side of us. We killed ten of them, which were as many as we could make use of for eating, or for converting into lamp oil. We kept on with the wind, from the South West, along the edge of the ice, which extended in a direction almost due East and West, till four in the morning of the 25th, Sunday 25. when observing a clear sea beyond it, to the South East, we made sail that way, with a view of forcing through it. By six, we had cleared it, and continued the remainder of the day running to the South East, without any ice in sight. At noon, our latitude, by observation, was $68^{\circ} 38'$, longitude $189^{\circ} 9'$, and the depth of water thirty fathoms. At midnight, we tacked, and stood to the Westward, with a fresh gale from the South; and at ten in the forenoon of the 26th, Monday 26. the ice again shewed itself, extending from North West to South. It appeared loose, and drifting, by the force of the wind, to the Northward. At noon, our latitude, by observation, was 68° North, longitude $188^{\circ} 10'$ East; and we had soundings with twenty-eight fathoms. For the remaining part of the day, and till noon of the 27th, we kept standing backward and forward, in order to clear ourselves of different bodies of ice. At noon, we were in latitude, by observation, $67^{\circ} 47'$, longitude 188° . At two in the afternoon, we saw the continent to the South by East; and at four, having run, since noon, with a South South East wind to the South West, we were surrounded by loose masses of ice, with the firm body of it in sight, stretching in a North by West, and a South by East direction, as far as the eye could reach; beyond which we saw the coast of Asia, bearing South, and South by East.

1779.
July.

Sunday 25.

Monday 26.

Tuesday 27.

1779.
July.

As it was now necessary to come to some determination with respect to the course we were next to steer, Captain Clerke sent a boat, with the carpenters, on board the Discovery, to inquire into the particulars of the damage she had sustained. They returned, in the evening, with the report of Captain Gore, and of the carpenters of both ships, that the damages they had received were of a kind that would require three weeks to repair; and that it would be necessary, for that purpose, to go into some port.

Thus, finding a farther advance to the Northward, as well as a nearer approach to either continent, obstructed by a sea blocked up with ice, we judged it both injurious to the service, by endangering the safety of the ships, as well as fruitless, with respect to the design of our voyage, to make any farther attempts toward a passage. This, therefore, added to the representations of Captain Gore, determined Captain Clerke not to lose more time in what he concluded to be an unattainable object, but to sail for Awatska Bay, to repair our damages there; and, before the winter should set in, and render all other efforts toward discovery impracticable, to explore the coast of Japan.

I will not endeavour to conceal the joy that brightened the countenance of every individual, as soon as Captain Clerke's resolutions were made known. We were all heartily sick of a navigation full of danger, and in which the utmost perseverance had not been repaid with the smallest probability of success. We therefore turned our faces toward home, after an absence of three years, with a delight and satisfaction, which, notwithstanding the tedious voyage we had still to make, and the immense distance we had to run, were as freely entertained, and perhaps as

fully enjoyed, as if we had been already in sight of the Land's-end.

1779.
July.

On the 28th, we kept working to windward with a fresh breeze from the South East, having the coast of Asia still in sight. At four in the morning, the Cape, which on the authority of Muller, we have called Serdze Kamen, bore South South West, distant six or seven leagues. We saw, in different places, upon the tops of the hills, which rise inland on both sides of the Cape, protuberances of a considerable height, which had the appearance of huge rocks, or pillars of stone. Wednes. 28.

On the 29th, the wind still continuing contrary, we made but slow progress to the Southward. At midnight we had thick, foggy weather, accompanied with a breeze from the North North West, with which we directed our course to the South South East, through the straits, and had no land in sight till seven in the evening of the 30th; when the fog clearing away, we saw Cape Prince of Wales bearing South by East, distant about six leagues; and the island St. Diomedé South West by West. We now altered our course to the West, and at eight made the East Cape, which, at midnight, bore West by North, distant four leagues. In the night we steered to the South South West, with a fresh West North Westerly breeze; and, at four in the morning of the 31st, the East Cape bore North North East, and the North East part of the bay of St. Laurence (where we anchored the last year) West by South, its distance being four leagues. As we could not have worked up to windward without a greater waste of time, than the object appeared to deserve, we ran across the bay, regretting much, as we passed along, the loss of this opportunity of paying a second visit to the Tschutski. At Thursday 29.
Friday 30.
Saturday 31.
noon

1779-
July.

noon our latitude, by observation, was $65^{\circ} 6'$, and longitude 189° . The South point of the Bay of St. Laurence bore North by West one quarter West, and was distant seven or eight leagues. In the afternoon the variation was found to be $22^{\circ} 50'$ East.

Having now passed Beering's Straits, and taken our final leave of the North East coast of Asia, it may not be improper, on this occasion, to state the grounds on which we have ventured to adopt two general conclusions respecting its extent, in opposition to the opinions of Mr. Muller. The first, that the promontory named East Cape is actually the Easternmost point of that quarter of the globe; or, in other words, that no part of the continent extends in longitude beyond $190^{\circ} 22'$ East: the second, that the latitude of the North Easternmost extremity falls to the Southward of 70° North. With respect to the former, if such land exist, it must necessarily be to the North of latitude 69° , where the discoveries made in the present voyage terminate; and, therefore, the probable direction of the coast, beyond this point, is the question I shall endeavour, in the first place, to investigate.

As the Russian is the only nation that has hitherto navigated these seas, all our information respecting the situation of the coast to the Northward of Cape North, must necessarily be derived from the charts and journals of the persons who have been employed, at various times, in ascertaining the limits of that empire; and these are, for the most part, so imperfect, so confused, and contradictory, that it is not easy to form any distinct idea of their pretended, much less to collect the amount of their real discoveries. It is on this account, that the extent and form of the peninsula, inhabited by the Tschutski, still remains a point, on which

which the Russian geographers are much divided. Mr. Muller, in his map, published in the year 1754, supposes this country to extend toward the North East, to the 75° of latitude, and in longitude 190° East of Greenwich, and to terminate in a round Cape, which he calls Tschukotskoi Nofs. To the Southward of this Cape he conceives the coast to form a bay to the Westward, bounded in latitude $67^{\circ} 18'$, by Serdze Kamen, the Northernmost point seen by Beering in his expedition in the year 1728. The map, published by the academy of St. Petersburg, in the year 1776, gives the whole peninsula intirely a new form, placing its North Easternmost extremity in the latitude 73° , longitude $178^{\circ} 30'$. The Easternmost point in latitude $65^{\circ} 30'$, longitude $189^{\circ} 30'$. All the other maps we saw, both printed and in manuscript, vary between these two, apparently more according to the fancy of the compiler, than on any grounds of more accurate information. The only point in which there is a general coincidence, without any considerable variation, is in the position of the East Cape in latitude 66° . The form of the coast, both to the South and North of this Cape, in the map of the academy, is exceedingly erroneous, and may be totally disregarded. In that of Mr. Muller, the coast to the Northward bears a considerable resemblance to our survey, as far as the latter extends, except that it does not trend sufficiently to the Westward; receding only about 5° of longitude, between the latitude of 66° and 69° ; whereas, in reality, it recedes near ten. Between the latitude of 69° and 74° , he makes the coast bend round to the North and North East, and to form a considerable promontory. On what authority, now remains to be examined.

Mr. Coxe, whose accurate researches into this subject, give his opinion great weight, is persuaded that the extremity of the

1779.
July.

1779.
July.

the *Nofs* in question, was never passed but by Deshneff and his party, who sailed from the river Kovyma in the year 1648, and are supposed to have got round it into the Anadyr. As the account of this expedition, the substance of which the Reader will find in Mr. Coxe's Account of Russian Discoveries, contains no geographical delineation of the coast along which they sailed, its position must be conjectured from incidental circumstances; and from these it appears very manifest, that the Tschukotskoi Nofs of Deshneff is no other than the promontory called, by Captain Cook, the East Cape. Speaking of the *Nofs*, he says, "One might sail from the isthmus to the river Anadyr, with a fair wind, in three days and three nights." This exactly coincides with the situation of the East Cape, which is about one hundred and twenty leagues from the mouth of the Anadyr; and as there is no other isthmus to the Northward between that and the latitude of 69°, it is obvious, that, by this description, he must intend either the Cape in question, or some other to the Southward of it. In another place he says, "Over against the isthmus there are two islands in the sea, upon which were seen people of the Tschutski nation, through whose lips were run pieces of the teeth of the sea-horse." This again perfectly agrees with the two islands situated to the South East of the East Cape. We saw indeed no inhabitants on them; but it is not at all improbable, that a party of the Americans, from the opposite continent, whom this description accurately suits, might, at that time, have been accidentally there; and whom it was natural enough for him to mistake for a tribe of the Tschutski *.

These

* From the circumstance, related in the last Volume, that gave name to Sledge Island, it appears, that the inhabitants of the adjacent continents visit occasionally the small

1779.
July.

These two circumstances are of so striking and unequivocal a nature, that they appear to me conclusive on the point of the Tschukotskoi Nofs, notwithstanding there are others of a more doubtful kind, which we have from the same authority, and which now remain to be considered. "To go," says Deshneff in another account, "from the Kovyma, to the Anadyr, a great promontory must be doubled, which stretches very far into the sea;" and afterward, "this promontory stretches between North and North East." It was probably from the expressions contained in these passages, that Mr. Muller was induced to give the country of the Tschutski the form we find in his map; but had he been acquainted with the situation of the East Cape, as ascertained by Captain Cook, and the remarkable coincidence between it and their promontory or isthmus (for it must be observed, that Deshneff appears to be all along speaking of the same thing), in the circumstances already mentioned, I am confident, he would not have thought those expressions, merely by themselves, of sufficient weight to warrant him in extending the North Eastern extremity of Asia, either so far to the North or to the Eastward. For, after

small islands lying between them, probably for the conveniency of fishing, or in pursuit of furs.

It appears also from Popoff's deposition, which I shall have occasion to speak of more particularly hereafter, that the general resemblance between the people, who are seen in these islands, and the Tschutski, was sufficient to lead Deshneff into the error of imagining them to be the same. "Opposite to the Nofs," he says, "is an island of moderate size, without trees, whose inhabitants *resemble, in their exterior, the Tschutski, although they are quite another nation*; not numerous indeed, yet speaking their own particular language." Again, "One may go in a baidare from the Nofs to the island in half a day: beyond is a great continent, which can be discovered from the island in serene weather. When the weather is good, one may go from the island to the continent in a day. *The inhabitants of the continent are similar to the Tschutski, excepting that they speak another language.*"

1779.
July.

all, these expressions are not irreconcilable with the opinion we have adopted, if we suppose Deshneff to have taken these bearings from the small bight which lies to the Westward of the Cape.

The deposition of the Cossac Popoff, taken at the Anadirskoi *ostrog*, in the year 1711, seems to have been the next authority on which Mr. Muller has proceeded; and beside these two, I am not acquainted with any other. This Cossac, together with several others, was sent by land to demand tribute from the independent Tschutski tribes, who lived about the Nofs. The first circumstance, in the account of this journey, that can lead to the situation of Tschukotskoi Nofs, is its distance from Anadirsk; and this is stated to be ten weeks journey, with loaded rein-deer; on which account it is added, their day's journey was but very small. It is impossible to conclude much from so vague an account; but, as the distance between the East Cape and the *ostrog* is upward of two hundred leagues in a straight line, and therefore may be supposed to allow twelve or fifteen miles a day; its situation cannot be reckoned incompatible with Popoff's calculation. The next circumstance mentioned in this deposition is, that their route lay by the foot of a rock called Matkol, situated at the bottom of a great gulf. This gulf Muller supposes to be the bay he had laid down between latitude 66° and 72° ; and accordingly places the rock Matkol in the center of it; but it appears equally probable, even if we had not so many reasons to doubt the existence of that bay, that it might be some part of the gulf of Anadir, which they would undoubtedly touch upon in their road from the *ostrog* to the East Cape.

But what seems to put this matter beyond all dispute, and to prove that the Cape visited by Popoff cannot be to the

1779.
July.

Northward of 69° latitude, is that part of his deposition, which I have already quoted, relative to the island lying off the Nofs, from whence the opposite continent might be seen. For as the two continents, in latitude 69° , have diverged so far as to be more than three hundred miles distant, it is highly improbable, that the Asiatic coast should again trend in such a manner to the Eastward, as to come nearly within sight of the Coast of America.

If these arguments should be deemed conclusive against the existence of the peninsula of the Tschutski, as laid down by Muller, it will follow, that the East Cape is the Tschukotskoi Nofs of the * more early Russian navigators; and, consequently, that the undescribed coast, from the latitude of 69° to the mouth of the river Kovyma, must uniformly trend more or less to the Westward. As an additional proof of this, it may be remarked, that the Tschukotskoi Nofs is always represented as dividing the sea of Kovyma from that of Anadir, which could not be the case, if any considerable cape had projected to the North East in the higher latitudes. Thus, in the depositions taken at Anadirsk, it is related, “ that opposite the Nofs, on both sides, as well “ in the sea of Kovyma, as in that of Anadir, an island is said “ to be seen at a great distance, which the Tschutski call a “ large country; and say, that people dwell there who have “ large teeth put in their mouths, that project through their “ cheeks.” Then follows a description of these people and their country, exactly corresponding with our accounts of the opposite continent.

* I mention the more early Russian navigators, because Beering, whom we have also followed, and after him all the late Russian geographers, have given this name to the South East Cape of the peninsula of the Tschutiki, which was formerly called the Anadirskoi Nofs.

1779.
July.

The last question that arises is, to what degree of Northern latitude this coast extends, before it trends more directly to the Westward. If the situation of the mouth of the Kovyma, both with respect to its latitude and longitude, were accurately determined, it would perhaps not be very difficult to form a probable conjecture upon this point. Captain Cook was always strongly of opinion, that the Northern coast of Asia, from the Indigirka eastward, has hitherto been generally laid down more than two degrees to the Northward of its true position; and he has, therefore, on the authority of a map that was in his possession, and on the information he received at Oonalashka, placed the mouth of the river Kovyma, in his chart of the North West coast of America, and the North East coast of Asia, in the latitude of 68° . Should he be right in this conjecture, it is probable, for the reasons that have been already stated, that the Asiatic coast does not any where exceed 70° before it trends to the Westward; and consequently, that we were within 1° of its North Eastern extremity. For, if the continent be supposed to stretch any where to the Northward of Shelat-skoi Nofs, it is scarcely possible, that so extraordinary a circumstance should not have been mentioned by the Russian navigators; and we have already shewn, that they make mention of no remarkable promontory between the Kovyma and the Anadir, except the East Cape. Another circumstance, related by Deshneff, may, perhaps, be thought a further confirmation of this opinion, namely, that he met with no impediment from ice in navigating round the North East extremity of Asia; though he adds, that this sea is not always so free from it; as indeed is manifest from the failure of his first expedition, and, since that, from the unsuccessful

successful attempts of Shalauoff, and the obstacles we met with, in two different years, in our present voyage.

1779.
July.

The continent, left undetermined in our chart, between Cape North, and the mouth of the Kovyma, is, in longitudinal extent, one hundred and twenty-five leagues. One third, or about forty leagues, of this distance, from the the Kovyma Eastward, was explored in the year 1723, by a *Sinbojarskoi* of Jakutz, whose name was Fedot Amossoff; by whom Mr. Muller was informed, that its direction was to the Eastward. It is said to have been since accurately surveyed by Shalauoff, whose chart makes it trend to the North East by East, as far as the Shelatskoi Nofs, which he places about forty-three leagues to the Eastward of the Kovyma. The space between this Nofs and Cape North, about eighty-two leagues, is therefore the only part of the Russian empire that now remains unascertained.

But if the river Kovyma be erroneously situated with respect to its longitude, as well as in its latitude, a supposition for which probable grounds are not wanting, the extent of the unexplored coast will become proportionably diminished. The reasons which incline me to believe, that the mouth of this river is placed in the Russian charts much too far to the Westward, are as follow: First, because the accounts that are given of the navigation of the Frozen Sea from that river, round the North East point of Asia, to the gulf of Anadir, do not accord with the supposed distance between those places. Secondly, because the distance over land, from the Kovyma to the Anadir, is represented by the early Russian travellers as a journey easily performed, and of no very extraordinary length. Thirdly, because the coast from the Shelatskoi Nofs of Shalauoff* seems to trend directly South

* See Chart in Coxe's Account of Russian Discoveries.

1779.
July.

East to the East Cape. If this be so, it will follow, that, as we were probably not more than 1° to the Southward of Shelatskoi Nofs, only sixty miles of the Asiatic coast remain unascertained.

Had Captain Cook lived to this period of our voyage, and experienced, in a second attempt, the impracticability of a North East or North West passage from the Pacific to the Atlantic Ocean, he would doubtless have laid before the Public, in one connected view, an account of the obstacles which defeated this, the primary object of our expedition, together with his observations on a subject of such magnitude, and which had engaged the attention, and divided the opinions of philosophers and navigators, for upward of two hundred years. I am very sensible how unequal I am to the task of supplying this deficiency; but that the expectations of the reader may not be wholly disappointed, I must beg his candid acceptance of the following observations, as well as of those I have already ventured to offer him, relative to the extent of the North East coast of Asia.

The evidence that has been so fully and judiciously stated in the introduction, amounts to the highest degree of probability, that a North West passage, from the Atlantic into the Pacific Ocean, cannot exist to the Southward of 65° of latitude. If then there exists a passage, it must be either through Baffin's Bay, or round by the North of Greenland, in the Western hemisphere; or else through the Frozen Ocean, to the Northward of Siberia, in the Eastern; and on whichever side it lies, the navigator must necessarily pass through Beering's Straits. The impracticability of penetrating into the Atlantic on either side, through this strait, is therefore all that remains to be submitted to the consideration of the Public.

As

As far as our experience went, it appears, that the sea to the North of Beering's strait, is clearer of ice in August than in July, and perhaps in a part of September it may be still more free. But after the equinox, the days shorten so fast, that no farther thaw can be expected; and we cannot rationally allow so great an effect to the warm weather in the first half of September, as to imagine it capable of dispersing the ice from the most Northern parts of the American coast. But admitting this to be possible, it must at least be granted, that it would be madness to attempt to run from the Icy Cape to the known parts of Baffin's Bay (a distance of four hundred and twenty leagues), in so short a time as that passage can be supposed to continue open.

1779.
July.

Upon the Asiatic side, there appears still less probability of success, both from what came to our own knowledge, with respect to the state of the sea to the Southward of Cape North, and also from what we learn from the experience of the * Lieutenants under Beering's direction, and the journal of Shalauoff, in regard to that on the North of Siberia.

The voyage of Deshneff, if its truth be admitted, proves undoubtedly the possibility of passing round the North East point of Asia; but when the reader reflects, that near a century and a half has elapsed since the time of that navigator, during which, in an age of great curiosity and enterprize, no man has yet been able to follow him, he will not entertain very sanguine expectations of the public advantages that can be derived from it. But let us even suppose, that in some singularly favourable season a ship has found a clear passage round the coast of Siberia, and is safely arrived at the mouth of the Lena, still there remains the Cape of Tai-

* See Gmelin, pages 369. 374.

1779:
July.

mura, stretching to the 78° of latitude, which the good fortune of no single voyager has hitherto doubled.

It is, however, contended, that there are strong reasons for believing, that the sea is more free from ice, the nearer we approach to the pole; and that all the ice we saw in the lower latitudes, was formed in the great rivers of Siberia and America, the breaking up of which had filled the intermediate sea. But even if that supposition be true, it is equally so, that there can be no access to those open seas, unless this great mass of ice is so far dissolved in the summer, as to admit of a ship's getting through it. If this be the fact, we have taken a wrong time of the year for attempting to find this passage, which should have been explored in April and May, before the rivers were broken up. But how many reasons may be given against such a supposition. Our experience at Saint Peter and Saint Paul enabled us to judge what might be expected farther North; and upon that ground, we had reason to doubt, whether the continents might not in winter be even joined by the ice; and this agreed with the stories we heard in Kamtschatka, that on the Siberian coast, they go out from the shore in winter, upon the ice, to greater distances than the breadth of the sea is, in some parts, from one continent to the other.

In the depositions referred to above, the following remarkable circumstance is related. Speaking of the land seen from the Tschukotskoi Nofs, it is said, "that in summer time they sail in one day to the land in baidares, a sort of vessel constructed of whale-bone, and covered with seal-skins; and in winter time, going swift with rein deer, the journey may likewise be made in a day." A sufficient proof,

proof, that the two countries were usually joined together by the ice.

1779.
July.

The account given by Mr. Muller, of one of the expeditions undertaken to discover a supposed island in the Frozen Sea, is still more remarkable. “ In the year 1714, a new expedition was prepared from Jakutzk, for the same place, under the command of Alexei Markoff, who was to sail from the mouth of the Jana; and if the *Schitiki* were not fit for sea voyages, he was to construct, at a proper place, vessels fit for prosecuting the discoveries without danger.

“ On his arrival at Ust-janskoe Simovie, the port at which he was to embark, he sent an account, dated February 2, 1715, to the Chancery of Jakutzk, mentioning, that it was impossible to navigate the sea, as it was continually frozen, both in summer and winter; and that, consequently, the intended expedition, was no otherwise to be carried on, but with sledges drawn by dogs. In this manner, he accordingly set out, with nine persons, on the 10th of March the same year, and returned on the 3d of April, to Ust-janskoe Simovie. The account of his journey is as follows: that he went seven days, as fast as his dogs could draw him (which, in good ways and weather, is eighty or a hundred wersts in a day) directly toward the North, upon the ice, without discovering any island: that it had not been possible for him to proceed any farther, the ice rising there in the sea like mountains: that he had climbed to the top of some of them, whence he was able to see to a great distance round about him, but could discern no appearance of
VOL. III. N n “ land:

1779.
July.

“ land: and that, at last, wanting food for his dogs, many
“ of them died, which obliged him to return.”

Besides these arguments, which proceed upon an admission of the hypothesis, that the ice in those seas comes from the rivers, there are others which give great room to suspect the truth of the hypothesis itself. Captain Cook, whose opinion respecting the formation of ice had formerly coincided with that of the theorists we are now controverting, found abundant reason, in the present voyage, for changing his sentiments. We found the coast of each continent to be low, the soundings gradually decreasing toward them, and a striking resemblance between the two; which, together with the description Mr. Hearne gives of the coppermine river, afford reason to conjecture, that whatever rivers may empty themselves into the Frozen Sea, from the American continent, are of the same nature with those on the Asiatic side; which are represented to be so shallow at the entrance, as to admit only small vessels; whereas the ice we have seen, rises above the level of the sea to a height equal to the depth of those rivers; so that its entire height must be at least ten times greater.

The curious reader will also, in this place, be led naturally to reflect on another circumstance, which appears very incompatible with the opinion of those who imagine land to be necessary for the formation of ice; I mean the different state of the sea about Spitsbergen, and to the North of Bering's Straits. It is incumbent on them to explain how it comes to pass, that in the former quarter, and in the vicinity of much known land, the navigator annually penetrates to near 80° North latitude; whereas, on the other side, his utmost

most efforts have not been able to carry him beyond 71° ; where, moreover, the continents diverge nearly East and West, and where there is no land yet known to exist near the pole. For the farther satisfaction of the reader on this point, I shall beg leave to refer him to *Observations made, during a voyage round the world*, by Dr. Forster, where he will find the question of the formation of ice, fully and satisfactorily discussed, and the probability of open polar seas disproved by a variety of powerful arguments.

1779.
July.

I shall conclude these remarks with a short comparative view of the progress we made to the Northward, at the two different seasons we were engaged in that pursuit, together with a few general observations relative to the sea, and the coast of the two continents, which lie to the North of Beer-
ing's Straits.

It may be observed, that in the year 1778, we did not meet with the ice, till we advanced to the latitude of 70° , on August 17th; and that then we found it in compact bodies, extending as far as the eye could reach, and of which a part or the whole was moveable, since, by its drifting down upon us, we narrowly escaped being hemmed in between it and the land. After experiencing both how fruitless and dangerous it would be to attempt to penetrate farther North, between the ice and the land, we stood over toward the Asiatic side, between the latitude 69° and 70° , frequently encountering, in this tract, large and extensive fields of ice; and though, by reason of the fogs, and thickness of the weather, we were not able absolutely and entirely to trace a connected line of it across, yet we were sure to meet with it before we reached the latitude of 70° , whenever we attempted to stand to the Northward. On the 26th of Au-

1779.
July.

gust, in latitude $69\frac{1}{4}^{\circ}$, and longitude 184° , we were obstructed by it in such quantities, as made it impossible for us to pass either to the North or West, and obliged us to run along the edge of it to the South South West, till we saw land, which we afterward found to be the coast of Asia. With the season thus far advanced, the weather setting in with snow and sleet, and other signs of approaching winter, we abandoned our enterprize for that time.

In this second attempt, we could do little more than confirm the observations we had made in the first; for we were never able to approach the continent of Asia higher than the latitude of 67° , nor that of America in any parts, excepting a few leagues between the latitude of 68° and $68^{\circ} 20'$, that were not seen the last year. We were now obstructed by ice 3° lower, and our endeavours to push farther to the Northward, were principally confined to the mid-space between the two coasts. We penetrated near 3° farther on the American side than on the Asiatic, meeting with the ice both years sooner, and in greater quantities, on the latter coast. As we advanced North, we still found the ice more compact and solid; yet as, in our different traverses from side to side, we passed over spaces which had before been covered with it, we conjectured, that most of what we saw was moveable. Its height, on a medium, we took to be from eight to ten feet, and that of the highest to have been sixteen or eighteen. We again tried the currents twice, and found them unequal, but never to exceed one mile an hour. By comparing the reckoning with the observations, we also found the current to set different ways, yet more from the South West than any other quarter; but whatever their direction might be, their effect was so trifling, that no conclusions, respecting

specting the existence of any passage to the Northward, could be drawn from them. We found the month of July to be infinitely colder than that of August. The thermometer in July was once at 28° , and very commonly at 30° ; whereas the last year, in August, it was very rare to have it so low as the freezing point. In both seasons, we had some high winds, all of which came from the South West. We were subject to fogs, whenever the wind was moderate, from whatever quarter, but they attended Southerly winds more constantly than contrary ones.

1779.
July.

The straits, between the two continents, at their nearest approach, in latitude 66° , were ascertained to be thirteen leagues, beyond which they diverge to North East by East and West North West; and in latitude 69° , they become 14° of longitude, or about one hundred leagues, asunder. A great similitude is observable in the appearance of the two countries, to the Northward of the straits. Both are destitute of wood. The shores are low, with mountains rising to a great height farther up the country. The depth of water, in the mid-way between them, was twenty-nine and thirty fathoms, decreasing gradually as we approached either continent, with the difference of being somewhat shoaler on the American than on the Asiatic coast, at the same distance from land. The bottom, in the middle, was a soft slimy mud; and on drawing near to either shore, a brown sand, intermixed with small fragments of bones, and a few shells. We observed but little tide or current; what there was, came from the Westward.

But it is now time to resume the narrative of our voyage, which was broken off on the 31st of July, on which day at noon we had advanced eighteen leagues to the Southward of the East Cape.

1779.
August.

Sunday 1.

We had light airs from the South West, till noon of the 1st of August, at which time our latitude, by observation, was $64^{\circ} 23'$, longitude $189^{\circ} 15'$, the coast of Asia extended from North West by West to West half South, distant about twelve leagues; and the land to the Eastward of Saint Lau-

Monday 2.

rence bore South half West. On the 2d, the weather becoming clear, we saw the same land at noon, bearing from West South West half West to South East, making in a number of high hummocks, which had the appearance of separate islands; the latitude, by observation, was $64^{\circ} 3'$, longitude $189^{\circ} 28'$, and depth of water seventeen fathoms. We did not approach this land sufficiently near to determine, whether it was one island, or composed of a cluster together. Its Westernmost part we passed July 3d, in the evening, and then supposed to be the island of Saint Laurence; the Easternmost we ran close by in September last year, and this we named Clerke's Island, and found it to consist of a number of high cliffs, joined together by very low land. Though we mistook, the last year, those cliffs for separate islands, till we approached very near the shore, I should still conjecture, that the island Saint Laurence was distinct from Clerke's Island, since there appeared a considerable space between them, where we could not perceive the smallest rising of ground. In the afternoon, we also saw what bore the appearance of a small island, to the North East of the land, which was seen at noon, and which, from the haziness of the weather, we had only sight of once. We estimated its distance to be nineteen leagues from the island of Saint Laurence, in a North East by East half East direction. On the 3d, we had light variable winds, and directed our course round the North West point of the island

Tuesday 3.

Wednesday 4.

of Saint Laurence. On the 4th, at noon, our latitude, by account,

1779-
August.

account, was $64^{\circ} 8'$, longitude 188° ; the Island St. Laurence bearing South one quarter East, distant seven leagues. In the afternoon, a fresh breeze springing up from the East, we steered to the South South West, and soon lost sight of St. Laurence. On the 7th, at noon, the latitude, by observation, was $59^{\circ} 38'$, longitude 183° . In the afternoon, it fell calm, and we got a great number of cod in seventy-eight fathoms of water. The variation was found to be 19° East. From this time, to the 17th, we were making the best of our way to the South, without any occurrence worth remarking, except that the wind coming from the Western quarter, forced us farther to the Eastward than we wished, as it was our intention to make Beering's island.

Saturday 7.

On the 17th, at half past four in the morning, we saw land to the North West, which we could not approach, the wind blowing from that quarter. At noon, the latitude, by observation, was $53^{\circ} 49'$, longitude $168^{\circ} 5'$, and variation 10° East. The land in sight bore North by West, twelve or fourteen leagues distant. This land we take to be the island Mednoi, laid down, in the Russian charts, to the South East of Beering's Island. It is high land, and appeared clear of snow. We place it in the latitude $54^{\circ} 28'$, longitude $167^{\circ} 52'$. We got no soundings with one hundred and fifty fathoms of line.

Tuesday 17.

Captain Clerke was now no longer able to get out of his bed; he therefore desired, that the officers would receive their orders from me, and directed that we should proceed, with all speed, to Awatka Bay. The wind continuing West-erly, we stood on to the South, till early on the morning of

1779.
August.
Thursday 19.

Friday 20.

Saturday 21.

the 19th, when, after a few hours rain, it blew from the Eastward, and freshened to a strong gale. We accordingly made the most of it whilst it lasted, by standing to the Westward, under all the sail we could carry. On the 20th, the wind shifting to the South West, our course was to the West North West. At noon, the latitude, by observation, was $53^{\circ} 7'$, longitude $162^{\circ} 49'$. On the 21st, at half past five in the morning, we saw a very high peaked mountain on the coast of Kamtschatka, called Cheepoonskoi Mountain, from its lying behind the Nofs, bearing North West by North, twenty-five or thirty leagues distant. At noon, the coast extended from North by East to West, with a very great haziness upon it, and distant about twelve leagues. We had light airs the remaining part of this and the following day, and got no soundings with one hundred and forty fathoms of line.

Sunday 22.

On the 22d of August, 1779, at nine o'clock in the morning, departed this life Captain Charles Clerke, in the thirty-eighth year of his age. He died of a consumption, which had evidently commenced before he left England, and of which he had lingered during the whole voyage. His very gradual decay had long made him a melancholy object to his friends; yet the equanimity with which he bore it, the constant flow of good spirits, which continued to the last hour, and a cheerful resignation to his fate, afforded them some consolation. It was impossible not to feel a more than common degree of compassion for a person, whose life had been a continued scene of those difficulties and hardships, to which a seaman's occupation is subject, and under which he at last sunk. He was brought up to the Navy from his earliest

1779.
August.

earliest youth, and had been in several actions during the war which began in 1756, particularly in that between the *Bellona* and *Courageux*, where being stationed in the mizen-top, he was carried overboard with the mast, but was taken up without having received any hurt. He was Midshipman in the *Dolphin*, commanded by Commodore Byron, on her first Voyage round the world, and afterward served on the American station. In 1768, he made his second voyage round the world, in the *Endeavour*, as Master's Mate, and by the promotion, which took place during the expedition, he returned a Lieutenant. His third voyage round the world was in the *Resolution*, of which he was appointed the Second Lieutenant: and soon after his return, in 1775, he was promoted to the rank of Master and Commander. When the present expedition was ordered to be fitted out, he was appointed to the *Discovery*, to accompany Captain Cook; and, by the death of the latter, succeeded, as has been already mentioned, to the chief command.

It would be doing his memory extreme injustice not to say, that during the short time the expedition was under his direction, he was most zealous and anxious for its success. His health, about the time the principal command devolved upon him, began to decline very rapidly, and was every way unequal to encounter the rigours of a high Northern climate. But the vigour and activity of his mind had, in no shape, suffered by the decay of his body: and though he knew, that by delaying his return to a warmer climate, he was giving up the only chance that remained for his recovery, yet, careful and jealous to the last degree, that a regard

1779.
August.

to his own situation should never bias his judgment to the prejudice of the service, he persevered in the search of a passage, till it was the opinion of every officer in both ships, that it was impracticable, and that any farther attempts would not only be fruitless, but dangerous.

CHAP. V.

Return to the Harbour of Saint Peter and Saint Paul.—Promotion of Officers.—Funeral of Captain Clerke.—Damages of the Discovery repaired.—Various other Occupations of the Ships Crews.—Letters from the Commander.—Supply of Flour and Naval Stores from a Russian Galliot.—Account of an Exile.—Bear-hunting and Fishing Parties.—Disgrace of the Serjeant.—Celebration of the King's Coronation Day, and Visit from the Commander.—The Serjeant reinstated.—A Russian Soldier promoted at our Request.—Remarks on the Discipline of the Russian Army.—Church at Paratounca.—Method of Bear-hunting.—Farther Account of the Bears and Kamtschadales.—Inscription to the Memory of Captain Clerke.—Supply of Cattle.—Entertainments on the Empress's Name Day.—Present from the Commander.—Attempt of a Marine to desert.—Work out of the Bay.—Nautical and Geographical Description of Awatska Bay.—Astronomical Tables, and Observations.

I SENT Mr. Williamfon to acquaint Captain Gore with the death of Captain Clerke, and received a letter from him, ordering me to use all my endeavours to keep in company with the Discovery; and, in case of a separation, to

1779.
August.
Sunday 22.

1779.
August.

Monday 23.

Tuesday 24.

make the best of my way to the harbour of St. Peter and St. Paul. At noon, we were in latitude $53^{\circ} 8'$ North, longitude $160^{\circ} 40'$ East, with Cheepooniskoi Nofs bearing West. We had light airs in the afternoon, which lasted through the forenoon of the 23d. At noon, a fresh breeze springing up from the Eastward, we stood in for the entrance of Awatka Bay; and at six in the evening, saw it bearing West North West half West, distant five leagues. At eight, the light house, in which we now found a good light, bore North West by West, three miles distant. The wind about this time died away; but the tide being in our favour, we sent the boats ahead, and towed beyond the narrow parts of the entrance; and, at one o'clock in the morning of the 24th, the ebb tide setting against us, we dropped anchor. At nine, we weighed, and turned up the bay with light airs, and the boats still ahead till one; when, by the help of a fresh breeze, we anchored, before three in the afternoon, in the harbour of St. Peter and St. Paul, with our ensign half staff up, on account of our carrying the body of our late Captain; and were soon after followed by the Discovery.

We had no sooner anchored, than our old friend, the Serjeant, who was still the Commander of the place, came on board with a present of berries, intended for our poor deceased Captain. He was exceedingly affected when we told him of his death, and shewed him the coffin that contained his body. And as it was Captain Clerke's particular request to be buried on shore, and, if possible, in the church of Paratounca, we took the present opportunity of explaining this matter to the Serjeant, and consulting with him about the proper steps to be taken on the occasion. In the course of our conversation, which, for want of an interpreter,

1779.
August.

ter, was carried on but imperfectly, we learned that Professor de L'Isle, and several Russian gentlemen, who died here, had been buried in the ground near the barracks, at the *ostrog* of St. Peter and St. Paul's; and that this place would be preferable to Paratounca, as the church was to be removed thither the next year. It was therefore determined, that we should wait for the arrival of the Priest of Paratounca, whom the Serjeant advised us to send for, as the only person that could satisfy our inquiries on this subject. The Serjeant having, at the same time, signified his intentions of sending off an express to the Commander at Bolcheretsk, to acquaint him with our arrival, Captain Gore availed himself of that occasion of writing him a letter, in which he requested that sixteen head of black cattle might be sent with all possible expedition. And because the Commander did not understand any language except his own, the nature of our request was made known to the Serjeant, who readily undertook to send, along with our letter, an explanation of its contents.

We could not help remarking, that, although the country was much improved in its appearance since we were last here, the Russians looked, if possible, worse now than they did then. It is to be owned, they observed, that this was also the case with us; and as neither party seemed to like to be told of their bad looks, we found mutual consolation in throwing the blame upon the country, whose green and lively complexion, we agreed, cast a deadness and fallowness upon our own.

The irruption of the volcano, which was so violent when we failed out of the bay, we found, had done no damage here, notwithstanding stones had fallen at the *ostrog*, of the
size

1779.
August.

size of a goose's egg. This was all the news we had to inquire after, and all they had to tell; excepting that of the arrival of Soposnikoff from Oonalashka, who took charge of the packet Captain Cook had sent to the Admiralty, and which, it gave us much satisfaction to find, had been forwarded.

Wednes. 25.

In the morning of the 25th, Captain Gore made out the new commissions, in consequence of Captain Clerke's death; appointing himself to the command of the Resolution, and me to the command of the Discovery; and Mr. Lanyan, master's Mate of the Resolution, who had served in that capacity on board the Adventure in the former voyage, was promoted to the vacant Lieutenancy. These promotions produced the following farther arrangements: Lieutenants Burney and Rickman were removed from the Discovery, to be First and Second Lieutenants of the Resolution; and Lieutenant Williamson was appointed First Lieutenant of the Discovery. Captain Gore also permitted me to take into the Discovery, four Midshipmen, who had made themselves useful to me in astronomical calculations, and whose assistance was now particularly necessary, as we had no *ephemeris* for the present year. And, that astronomical observations might continue to be made in both ships, Mr. Bayley took my place in the Resolution. The same day we were visited by the Pope Romanoff Vereshagen, the worthy Priest of Paratounca. He expressed his sorrow at the death of Captain Clerke in a manner that did honour to his feelings, and confirmed the account given by the Serjeant, respecting the intended removal of the church to the harbour; adding, that the timber was actually preparing, but leaving the choice of either place entirely to Captain Gore.

The Discovery, as has been mentioned, had suffered great damage from the ice, particularly on the 23d day of July; and having, ever since, been exceedingly leaky, it was imagined that some of her timbers had started. Captain Gore therefore sent the carpenters of the Resolution to assist our own in repairing her; and accordingly, the forehold being cleared, to lighten her forward, they were set to work to rip the damaged sheathing from the larboard bow. This operation discovered, that three feet of the third strake, under the wale, were flayed, and the timbers within started. A tent was next erected, for the accommodation of such of our people as were employed on shore; and a party were sent a mile into the country, to the Northward of the harbour, to fell timber. The observatories were erected at the West end of the village, near a tent, in which Captain Gore and myself took up our abode.

1779.
August.

The farther we proceeded in removing the sheathing, the more we discovered of the decayed state of the ship's hull. The next morning, eight feet of a plank in the wale were found to be so exceedingly rotten, as to make it necessary to shift it. This left us for some time at a stand, as nothing was to be found, in either ship, wherewith to replace it, unless we chose to cut up a top-mast; an expedient not to be had recourse to, till all others failed. The carpenters were therefore sent on shore in the afternoon, in search of a tree big enough for the purpose. Luckily they found a birch, which I believe was the only one of sufficient size in the whole neighbourhood of the bay, and which had been sawed down by us when we were last here; so that it had the advantage of having lain some time to season. This was shaped on the spot, and brought on board the next morning.

Thursday 26.

As

1779.
August.

Saturday 28.

As the season was now so far advanced, I was fearful lest any delay or hindrance should arise, on our parts, to Captain Gore's farther views of discovery, and therefore gave orders that no more sheathing should be ripped off, than was absolutely necessary for repairing the damages sustained by the ice. This I did, being apprehensive of their meeting with more decayed planks, which, I judged, had much better remain in that state, than be filled up with green birch, upon a supposition that such was to be had. All hands were, at present, busily employed in separate duties, that every thing might be in readiness for sea, against the time our carpenters should have finished their work. We set apart four men to haul the seine for salmon, which were caught in great abundance, and found to be of an excellent quality. After supplying the immediate wants of both ships, we salted down near a hoghead a day. The invalids, who were four in number, were employed in gathering greens, and in cooking for the parties on shore. Our powder was also landed, in order to be dried; and the sea-horse blubber, with which both ships, in our passage to the North (as has been before related), had stored themselves, was now boiled down for oil, which was become a necessary article, our candles having long since been expended. The cooper was fully engaged in his department: and in this manner were both ships companies employed in their several occupations, till Saturday afternoon, which was given up to all our men, except the carpenters, for the purpose of washing their linen, and getting their clothes in some little order, that they might make a decent appearance on Sunday.

Sunday 29.

In the afternoon of that day, we paid the last offices to Captain Clerke. The officers and men of both ships walked in

1779.
August.

in procession to the grave, whilst the ships fired minute-guns; and the service being ended, the marines fired three vollies. He was interred under a tree, which stands on rising ground, in the valley to the North side of the harbour, where the hospital and store houses are situated; Captain Gore having judged this situation most agreeable to the last wishes of the deceased, for the reasons above-mentioned; and the Priest of Paratounca having pointed out a spot for his grave, which, he said, would be as near as he could guess, in the centre of the new church. This reverend Pastor walked in the procession, along with the gentleman who read the service; and all the Russians in the garrison were assembled, and attended with great respect and solemnity.

On the 30th, the different parties returned to their respective employments, as mentioned in the course of the preceding week; and on the 2d of September, the carpenters having shifted the rotten and damaged planks, and repaired and caulked the sheathing of the larboard bow, proceeded to rip off the sheathing that had been injured by the ice, from the starboard side. Here, again, they discovered four feet of a plank, in the third strake under the wale, so shaken, as to make it necessary to be replaced. This was accordingly done, and the sheathing repaired on the 3d. In the afternoon of the same day, we got on board some ballast, unhung the rudder, and sent it on shore, the lead of the pintles being found entirely worn away, and a great part of the sheathing rubbed off. As the carpenters of the Resolution were not yet wanted, we got this set to rights the next day, but finding the rudder out of all proportion heavy, even heavier than that of the Resolution, we let it remain on shore, in order to dry and lighten.

Monday 30.

September.
Thursday 2.

Friday 3.

Saturday 4.

1779.
September.

The same day, an ensign arrived from Bolcheretsk with a letter from the Commander to Captain Gore, which we put into the Serjeant's hands, and, by his assistance, were made to understand, that orders had been given about the cattle; and that they might be expected here in a few days; and, moreover, that Captain Shmaleff, the present Commander, would himself pay us a visit immediately on the arrival of a sloop which was daily expected from Okotzk. The young officer, who brought the letter, was the son of the Captain Lieutenant Synd, who commanded an expedition on discovery, between Asia and America, eleven years ago, and resided at this time at Okotzk *. He informed us, that he was sent to receive our directions, and to take care to get us supplied with whatever our service might require; and that he should remain with us, till the Commander was himself able to leave Bolcheretsk; after which he was to return, that the garrison there might not be left without an officer.

Sunday 5.

On the 5th, the parties that were on shore returned on board, and were employed in scrubbing the ship's bottom,

* See all that is known of his voyage, and a Chart of his discoveries, in Mr. Coxe's *Account of Russian Discoveries between Asia and America*. We were not able to learn, from the Russians in Kamtschatka, a more perfect account of Synd than we now find is given by Mr. Coxe; and yet they seemed disposed to communicate all that they really knew. Major Behm could only inform us, in general, that the expedition had miscarried as to its object, and that the commander had fallen under much blame. It appeared evidently, that he had been on the coast of America to the Southward of Cape Prince of Wales, between the latitude of 64° and 65°; and it is most probable, that his having got too far to the Northward to meet with sea-otters, which the Russians, in all their attempts at discoveries, seem to have principally in view, and his returning without having made any that promised commercial advantages, was the cause of his disgrace, and of the great contempt with which the Russians always spoke of this officer's voyage.

The cluster of islands, placed in Synd's chart, between the latitude of 61° and 65°, is undoubtedly the same with the island, called, by Beering, St. Laurence's, and those we named Clerke's, Anderson's, and King's Islands; but their proportionate size, and relative situation, are exceedingly erroneous.

and getting in eight tons of shingle ballast. We also got up two of our guns, that had been stowed in the fore-hold, and mounted them on the deck, being now about to visit nations, our reception amongst whom might a good deal depend on the respectability of our appearance.

1779.
September.

The Resolution hauled on shore on the 8th, to repair some damages, which she had also received among the ice, in her cutwater; and our carpenters, in their turn, were sent to her assistance. Wednes. 8.

About this time we began to brew a strong decoction of a species of dwarf-pine that grows here in great abundance, thinking that it might hereafter be useful in making beer, and that we should probably be able to procure sugar or melasses to ferment with it at Canton. At all events, I was sure it would be serviceable as a medicine for the scurvy; and was more particularly desirous of supplying myself with as much of it as I could procure, because most of the preventatives we had brought out, were either used, or spoiled by keeping. By the time we had prepared a hoghead of it, the ship's copper was discovered to be very thin, and cracked in many places. This obliged me to desist, and to give orders, that it should be used as sparingly, for the future, as possible. It might, perhaps, be an useful precaution for those who may hereafter be engaged in long voyages of this kind, either to provide themselves with a spare copper, or to see that the copper usually furnished be of the strongest kind. The various extraservices, in which it will be found necessary to employ them, and especially the important one of making antiscorbutic decoctions, seem absolutely to require some such provision; and I should rather recommend the former on account

1779.
September.

of the additional quantity of fuel that would be consumed in heating thick coppers.

Friday 10.

In the morning of the 10th, the boats from both ships were sent to tow into the harbour a Russian galliot from Okotzk. She had been thirty-five days on her passage, and had been seen from the light-house a fortnight ago, beating up toward the mouth of the bay. At that time, the crew had sent their only boat on shore for water, of which they now began to be in great want; and the wind freshening, the boat was lost on its return; and the galliot, being driven out to sea again, had suffered exceedingly.

There were fifty foldiers in her, with their wives and children; and several other passengers, besides the crew, which consisted of twenty-five; so that they had upward of an hundred souls on board. A great number for a vessel of eighty tons; and that was also heavy laden with stores and provisions. Both this galliot, and the sloop we saw here in May, are built like the Dutch doggers. Soon after she had come to anchor, we received a visit from a *Put-parouchich*, or Sub-lieutenant, who was a passenger in the galliot, and sent to take the command of this place. Part of the foldiers, we understood, were also designed to reinforce the garrison; and two pieces of small cannon were landed, as an additional defence to the town. It should seem, from these circumstances, that our visit here had drawn the attention of the Russian Commanders in Siberia to the defenceless situation of the place; and I was told by the honest Serjeant, with many significant shrugs, that, as we had found our way into it, other nations might do the same, some of whom might not be altogether so welcome.

Next morning the Resolution hauled off from the shore, having repaired the damages she had sustained by the ice; and, in the course of the day, we got from the galliot a small quantity of pitch, tar, cordage, and twine; canvass was the only thing we asked for, with which their scanty store did not put it into their power to supply us. We also received from her an hundred and forty skins of flour, amounting to 13,782 pounds English, after deducting five pounds for the weight of each bag.

1779.
September.
Saturday 11th

We had a constant course of dry weather till this day, when there came on a heavy rain, accompanied with strong squalls of wind, which obliged us to strike our yards and topmasts.

The 12th, being Sunday, was kept as a day of rest; but the weather unfortunately continuing foul, our men could not derive the advantage from it we wished, by gathering the berries that grew in great quantities and varieties on the coast; and taking other pastime on shore. The same day, Ensign Synd left us to return to Bolcheretsk with the remainder of the foldiers that came in the galliot. He had been our constant guest during his stay. Indeed, we could not but consider him, on his father's account, as, in some measure, belonging to us, and entitled, as one of the family of discoverers, to a share in our affections.

We had hitherto admitted the Serjeant to our tables, in consideration of his being Commander of the place; and, moreover, because he was a quick, sensible man, and comprehended better than any other the few Russian words we had learned. Ensign Synd had very politely suffered him to enjoy the same privileges during his stay; but, on the arrival of the new Commander from Okotzk, the Serjeant,
for

1779.
September.

for some cause or other, which we could not learn, fell into disgrace, and was no longer suffered to sit down in the company of his own officers. It was in vain to think of making any attempt to obtain an indulgence, which, though it would have been highly agreeable to us, was doubtless incompatible with their discipline.

Wednes. 15.

On Wednesday we had finished the stowage of the holds; got on board all our wood and water; and were ready to put to sea at a day's notice. It is however necessary to observe, that though every thing was in this degree of readiness on board, the cattle were not yet arrived from Verchnei; and as fresh provisions were the most important article of our wants, and in a great measure necessary for the health of the men, we could not think of taking our departure without them. We therefore thought this a favourable opportunity (especially as there was an appearance of fine weather) of taking some amusement on shore, and acquiring a little knowledge of the country. Accordingly, Captain Gore proposed a party of bear-hunting, which we all very readily came into.

Friday 17.

We did not set out on this expedition till Friday the 17th, in order to give a day's rest to the Hospodin Ivaskin, a new acquaintance, that was to be of our party, and who came down here on Wednesday. This gentleman, who, we understood, usually resides at Verchnei, had been desired by Major Behm to attend us on our return to the harbour, in order to be our interpreter; and the accounts we had heard of him, before his arrival, had excited in us a great curiosity to see him.

He is of a considerable family in Russia. His father was a General in the Empress's service; and he himself, after
having

1779.
September.

having received his education partly in France, and partly in Germany, had been page to the Empress Elizabeth, and an Ensign in her guards. At the age of sixteen he was *knowted*, had his nose slit, and was banished first to Siberia and afterward to Kamtschatka, where he had now lived thirty-one years. He was a very tall thin man, with a face all over furrowed with deep wrinkles; and bore, in his whole figure, the strongest marks of old age, though he had scarcely reached his fifty-fourth year.

To our very great disappointment, he had so totally forgotten both his German and French, as not to be able to speak a sentence, nor readily to understand what was said to him, in either of these languages. We found ourselves thus unfortunately deprived of what we flattered ourselves would have turned out a favourable opportunity of getting farther information relative to this country. We had also promised ourselves much pleasure from the history of this extraordinary man, which he probably would have been induced to relate to strangers, who might perhaps be of some little service to him, but who could have no inducement to take advantage, from any thing he might say, to do him an injury. No one here knew the cause of his banishment; but they took it for granted, that it must have been for something very atrocious; particularly, as two or three Commanders of Kamtschatka have endeavoured to get him recalled, since the present Empress's reign; but far from succeeding in this, they have not been even able to get the place of his banishment changed. He told us, that, for twenty years, he had not tasted bread, nor had been allowed subsistence of any kind whatsoever; but that, during this period, he had lived among the Kamtschadales, on what his own activity and toil in the chase had furnished. That afterward

1779.
September.

terward he had a small pension granted; and that since Major Behm came to the command, his situation had been infinitely mended. The notice that worthy man had taken of him, and his having often invited him to become his guest, had been the occasion of others following his example; besides which, he had been the means of getting his pension increased to one hundred roubles a year; which is the common pay of an Ensign in all parts of the Empress's dominions, except in this province, where the pay of all the officers is double. Major Behm told us, that he had obtained permission to take him to Okotzk, which was to be the place of his residence in future; but that he should leave him behind for the present, on an idea, that he might, on our return to the bay, be useful to us as an interpreter.

Having given orders to the First Lieutenants of both ships, to let the rigging have such a repair as the supply of stores, we had lately received, would permit, we set out on our hunting party, under the direction of the corporal of the Kamtschadales, intending, before we began to look for our game, to proceed straight to the head of Behm's Harbour. It is an inlet on the West side of the bay (which we had named after that officer, from its being a favourite place of his, and having been surveyed by himself), and is called by the natives Tareinska.

In our way toward this harbour, we met the *Toion* of Saint Peter and Saint Paul, in a canoe, with his wife and two children, and another Kamtschadale. He had killed two seals upon a round island, that lies in the entrance of the harbour, with which, and a great quantity of berries that he had gathered, he was returning home. As the wind had veered to the South West, we now changed our route, by his

1779.
September.

his advice; and, instead of going up the harbour, directed our course to the Northward, toward a pool of water that lies near the mouth of the river Paratounca, and which was a known haunt of the bears. We had scarce landed, when unfortunately the wind changed to the Eastward, and a second time destroyed all hopes of coming up with our game; for the Kamtschadales assured us, that it was in vain to expect to meet with bears, whilst we were to the windward; owing to their being possessed of an uncommon acuteness in scenting their pursuers, which enabled them, under such circumstances, to avoid the danger, whilst it is yet at a very great distance. We returned therefore to the boat, and passed the night on the beach, having brought a tent with us for that purpose; and the next day, by the advice of our guides, crossed the bay, and went to the head of Rakoweena Harbour.

Saturday 18.

Having here secured the boats, we proceeded with all our luggage on foot, and, after a walk of five or six miles, came to the sea-side, a league to the Northward of the Lighthouse Head. From hence, as far as we could see toward Cheepooniskoi Nofs, there is a continued narrow border of low level ground adjoining to the sea, which is covered with heath, and produces great abundance of berries, particularly those called partridge and crow berries. We were told, we should not fail to meet with a number of bears, feeding upon these berries; but that the weather being showery, was unfavourable for us.

Accordingly, we directed our course along this plain; and though we saw several bears at a distance, we could never, with all our management, contrive to get within shot of them. Our diversion was therefore changed to spearing of

1779.
September.

salmon, which we saw pushing, in great numbers, through the surf into a small river. I could not help observing, how much inferior our Kamtschadales were at this method of fishing, to the people at Oonalashka; nor were their instruments, although pointed with iron, near so good for the purpose, nor to be compared in neatness, to those of the Americans, though pointed only with bone. On inquiring into the reason of this inferiority, I was informed by the corporal, who had lived many years amongst the Americans, that formerly the Kamtschadales made use of the same kind of darts and spears with the Americans, headed and barbed with bone, and were not less dexterous in the management of them than the latter. We could not understand one another sufficiently for me to learn the cause of this change; probably it was one of the not unusual effects of a forced and imperfect state of improvement. It fell out very opportunely, that the water afforded us a little prey; for besides our ill success in the chase by land, we had also been disappointed in our expectations of shooting wild fowl, on a supply of which we had in some measure depended for our subsistence; and on its failure, began to think that we had been full long absent from head-quarters.

Our Kamtschadales now discovered, that the want of success, in not meeting with game, was owing to the party being too large, and to the unavoidable noise that was the consequence of it. We therefore agreed to separate; Ivafkin, the corporal, and myself, forming one party; Captain Gore, and the rest of the company, the other.

Accordingly, after passing the night under our tent, we set out on the morning of the 19th, by different routes, meaning to take a circuit round the country, and meet at
Saint

1775.
September.

Saint Peter and Saint Paul. The party to which I belonged, took the course of the river, at the mouth of which we had fished for the salmon; and, after being thoroughly soaked by the heavy rains that fell all the morning, we came about three in the afternoon to some old *balagans*, where a Kamtschadale village had been formerly situated, without meeting with a single bear during the whole of a long and tedious walk. It was our first intention to have remained here all night, in order to have resumed our chase early the next morning; but the weather clearing, and at the same time a fresh breeze springing up from a quarter unfavourable to our designs, the Hospodin, whom former sufferings had made very unfit to bear much fatigue, and who seemed, at present, more particularly distressed from having emptied his snuff-box, began to be very importunate with us to return home. It was some time before the old corporal consented, alleging, that we were at a great distance from the harbour; and that, on account of the badness of the way, the night would probably overtake us before we reached the end of our journey. At length, however, he yielded to Ivaskin's intreaties, and conducted us along the side of a number of small lakes, with which the flat part of this country seems much to abound. These lakes are from half a mile to two miles in length, and about half a mile broad; the water is fresh and clear, and they are full of a red coloured fish, resembling, both in shape and size, a small salmon; of which a more particular description will be given hereafter. The banks of these lakes were covered with the fragments of fish that the bears had half eaten, and which caused an intolerable stench. We often came upon the spots which the bears had just left, but were never able even to come within sight of them.

1779.
September.

It was night before we reached the ships, and we had then been twelve hours upon our legs. Poor Ivaskin found himself exceedingly tired and overcome with fatigue; probably, he was more sensible of it, for want of a supply of snuff; for, every step he took, his hand dived mechanically into his pocket, and drew out his huge empty box. We had scarcely got into the tent, when the weather set in exceedingly rough and wet. We congratulated ourselves, that we had not stayed out another day, the Hospodin's box was replenished, and we forgot the fatigues and ill success of our expedition over a good supper.

Monday 20.

I was exceedingly sorry, on being told the next day, that our friend the serjeant had undergone corporal punishment, during our absence, by command of the old *Put-parrouchick*. None of our people had been able to learn what was the cause of his displeasure; but it was imagined to have arisen from some little jealousy subsisting between them, on account of the civility which we had shewn to the former. However, having every reason to believe, that the offence, whatever it might be, did not call for so disgraceful a chastisement, we could not help being both sorry and much provoked at it, as the terms on which we had lived with him, and the interest we were known to take in his affairs, made the affront in some measure personal to ourselves. For it has not yet been mentioned, that we had consulted with the late worthy Commander, Major Behm, who was also his friend, by what means we might be most likely to succeed in doing him some service, for the good order he had kept in the *offrog* during our stay, and for his readiness, on all occasions, to oblige us. The Major advised a letter of recommendation to the Governor General, which Captain Clerke had accordingly given him, and
which,

which, backed with his own representations, he had no doubt would get the serjeant advanced a step higher in his profession.

1779.
September.

We did not choose to make any remonstrance on this subject, till the arrival of Captain Shmaleff. Indeed our inability, from the want of language, to enter into any discussion of the business, made it advisable to come to this determination. However, when the *Put-parouchick* paid us his next visit, we could not help testifying our chagrin, by receiving him very coolly.

The 22d, being the anniversary of his Majesty's coronation, twenty-one guns were fired, and the handsomest feast our situation would allow of was prepared, in honour of the day. As we were sitting down to dinner, the arrival of Captain Shmaleff was announced. This was a most agreeable surprize; in the first place, because he arrived so opportunely to partake of the good fare and festivity of the occasion; and, in the next, because, in our last accounts of him, we were given to understand, that the effects of a severe illness had made him unequal to the journey. We were glad to find this had been merely an excuse; that, in fact, he was ashamed of coming empty-handed, knowing we must be in great want of tea, sugar, &c. &c.; and that therefore he had deferred his setting out, in daily expectation of the sloop from Okotsk; but having no tidings of her, and dreading lest we should fail, without his having paid us a visit, he was determined to set out, though with nothing better to present to us, than apologies for the poverty of Bolcheretsk. At the same time, he acquainted us, that our not having received the sixteen head of black cattle, we had desired might be sent down, was owing to the very heavy rains

Wednes. 22.

at

1779.
September.

at Verchnei, which had prevented their setting out. We made the best answer we were able, to so much politeness and generosity; and the next day, on coming on board the Resolution, he was saluted with eleven guns. Specimens of all our curiosities were presented to him; and Captain Gore added to them a gold watch, and a fowling-piece.

Saturday 25. The next day, he was entertained on board the Discovery; and on the 25th, he took leave of us to return to Bolcheretfk. He could not be prevailed on to lengthen his visit, having some expectations, as he told us, that the Sub-governor General, who was at this time making a tour through all the provinces of the Governor General of Jakutsk, might arrive in the sloop that was daily expected from Okotsk. Before his departure, and without any interference of ours, he re-instituted the Serjeant in the command of this place, having determined to take the *Put-parouchick* along with him; at the same time, we understood that he was highly displeased with him, on account of the punishment that had been inflicted on the Serjeant, and for which there did not appear to be the slightest grounds.

Captain Shmaleff's great readiness to give us every possible proof of his desire to oblige us, encouraged us to ask a small favour, for another of our Kamtschadale friends. It was to requite an old soldier, whose house had been, at all times, open to the inferior officers, and who had done both them, and all the crew, a thousand good offices. The Captain most obligingly complied with our request, and dubbed him (which was all he wished for) a corporal, upon the spot; and ordered him to thank the English officers for his great promotion. It may not here be improper to ob-

1779.
September.

serve, that, in the Russian army, the inferior class of officers enjoy a degree of pre-eminence above the private men, with which we, in our service, are in a great measure unacquainted. It was no small astonishment to us, to see a Serjeant keep up all the state, and exact all the respect, from all beneath him, belonging to a field officer. It may be farther remarked, that there are many more gradations of rank amongst them, than are to be met with in other countries. Between a serjeant and a private man, there are not less than four intermediate steps; and I have no doubt, but that the advantages arising from this system are found to be very considerable. The salutary effects of little subordinate ranks in our sea-service, cannot be questioned. It gives rise to great emulation, and the superior officers are enabled to bestow, on almost every possible degree of merit, a reward proportioned to it.

Having been incidentally led into this subject, I shall beg leave to add but one observation more, namely, that the discipline of the Russian army, though at this distance from the seat of government, is of the strictest and severest kind; from which even the commissioned officers are not exempt. The punishment of the latter for small offences is imprisonment, and a bread and water diet. An Ensign, a good friend of ours at this place, told us, that for having been concerned in a drunken riot, he was confined in the black hole for three months, and fed upon bread and water; which, he said, so shattered his nerves, that he had never since had spirits for a common convivial meeting.

I accompanied Captain Shmaleff to the entrance of Awat-ska River, and, having bid him farewell, took this opportunity of paying a visit to the Priest of Paratounca. On Sunday
the

1779.
 September.
 Sunday 26.

the 26th, I attended him to church. The congregation consisted of his own family, three Kamtschadale men, and three boys, who assisted in singing part of the service; the whole of which was performed in a very solemn and edifying manner. The church is of wood, and by far the best building either in this town, or in that of St. Peter and St. Paul. It is ornamented with many paintings, particularly with two pictures of St. Peter and St. Paul, presented by Beering; and which, in the real richness of their drapery, would carry off the prize from the first of our European performances; for all the principal parts of it are made of thick plates of solid silver, fastened to the canvass, and fashioned into the various foldings of the robes with which the figures were clothed.

Monday 27.

The next day, I set on foot another hunting party, and put myself under the direction of the Clerk of the parish, who was a celebrated bear-hunter. We arrived, by sun-set, at the side of one of the larger lakes. The next step was to conceal ourselves as much as possible; and this we were able to do very effectually, among some long grass and brushwood, that grew close to the water's edge. We had not lain long in ambush, before we had the pleasure to hear the growlings of bears in different parts round about us; and our expectations were soon gratified, by the sight of one of them in the water, which seemed to be swimming directly to the place where we lay hid. The moon, at this time, gave a considerable light; and when the animal had advanced about fifteen yards, three of us fired at it, pretty nearly at the same time. The beast immediately turned short on one side, and set up a noise, which could not properly be called roaring, nor growling, nor yelling, but was
 a mixture

1779.
September.

a mixture of all three, and horrible beyond description. We plainly saw that it was severely wounded, and that with difficulty it gained the bank, and retreated to some thick bushes at a little distance. It still continued to make the same loud and terrible noise; and though the Kamtschadales were persuaded it was mortally wounded, and could get no farther, yet they thought it most adviseable not to rouse it again for the present. It was, at this time, past nine o'clock; and the night becoming overcast, and threatening a change of weather, we thought it most prudent to return home, and defer the gratification of our curiosity till morning, when we returned to the spot, and found the bear dead in the place to which it had been watched. It proved to be a female, and beyond the common size.

As the account of our first hunting party will be apt to give the reader a wrong idea of the method in which this sport is usually conducted; it may not be amiss to add a few more words on the subject; and which I am the better able to do since this last expedition.

When the natives come to the ground frequented by the bears, which they contrive to reach about sun-set, the first step is to look for their tracks, to examine which are the freshest, and the best situated with a view to concealment, and taking aim at the beast, either as he is passing by, or advancing in front, or going from them. These tracks are found in the greatest numbers, leading from the woods down to the lakes, and among the long sedgy grass and brakes by the edge of the water. The place of ambuscade being determined upon, the hunters next fix in the ground the crutches, upon which their firelocks are made to rest, pointing them in the direction they mean to make their

1779.
September.

shot. This done, they kneel or lie down, as the circumstances of the cover require; and, with their bear-spears by their side, wait for their game. These precautions, which are chiefly taken, in order to make sure of their mark, are, on several accounts, highly expedient. For, in the first place, ammunition is so dear at Kamtschatka, that the price of a bear will not purchase more of it than is sufficient to load a musket four or five times; and, what is more material, if the bear be not rendered incapable of pursuit by the first shot, the consequences are often fatal. He immediately makes toward the place from whence the noise and smoke issue, and attacks his adversaries with great fury. It is impossible for them to reload, as the animal is seldom at more than twelve or fifteen yards distance, when he is fired at: so that, if he does not fall, they immediately put themselves in a posture to receive him upon their spears; and their safety greatly depends on their giving him a mortal stab, as he first comes upon them. If he parries the thrust (which, by the extraordinary strength and agility of their paws, they are often enabled to do), and thereby breaks in upon his adversaries, the conflict becomes very unequal, and it is well if the life of one of the party alone suffice to pay the forfeit.

There are two seasons of the year when this diversion, or occupation, as it may be rather called, is more particularly dangerous: in the spring, when the bears first come forth, after having subsisted, as is universally asserted here, on sucking their paws through the winter; and especially if the frost happen to be severe, and the ice not to be broken up in the lake at that time, by which means they are deprived of their ordinary and expected food. Under these circumstances, they soon become exceedingly famished, and

1779.
September.

fierce and savage in proportion. They will pursue the natives by the scent; and, as they now prowl about out of their usual tracks, frequently come upon them unawares; and when this happens, as the Kamtschadales have not the smallest notion of shooting flying, nor even at an animal running, or in any way except with their piece on a rest, the bear-hunters often fall a sacrifice to their hunger. The other season in which it is dangerous to come in their way, is at the time of their copulation, which is generally about this time of the year.

An extraordinary instance of natural affection in these animals hath been already mentioned. The chase affords a variety of a similar nature, and not less affecting; many of which were related to me. The Kamtschadales derive great advantage in hunting, from this circumstance. They never venture to fire upon a young bear, when the mother is near: for, if the cub drop, she becomes enraged to a degree little short of madness; and if she get sight of the enemy, will only quit her revenge with her life. On the contrary, if the dam be shot, the cubs will not leave her side, even after she has been dead a long time; but continue about her, shewing, by a variety of affecting actions and gestures, marks of the deepest affliction, and thus become an easy prey to the hunters.

Nor is the sagacity of the bears, if the Kamtschadales are to be credited, less extraordinary, or less worthy to be remarked, than their natural affection. Of this they have a thousand stories to relate. I shall content myself with mentioning one instance, which the natives speak of as a well-known fact; and that is, the stratagem they have recourse to, in order to catch the bareins, which are considerably

1779.
September.

too swift of foot for them. These animals keep together in large herds; they frequent mostly the low grounds, and love to browse at the feet of rocks and precipices. The bear hunts them by scent, till he come in sight; when he advances warily, keeping above them, and concealing himself amongst the rocks, as he makes his approaches, till he gets immediately over them, and nigh enough for his purpose. He then begins to push down, with his paws, pieces of the rock amongst the herd below. This manœuvre is not followed by any attempt to pursue, until he find he has maimed one of the flock, upon which a course immediately ensues, that proves successful, or otherwise, according to the hurt the barcin has received.

I cannot conclude this digression, without observing, that the Kamtschadales very thankfully acknowledge their obligations to the bears for what little advancement they have hitherto made, either in the sciences or polite arts. They confess that they owe to them all their skill both in physic and surgery; that by remarking with what herbs these animals rub the wounds they have received, and what they have recourse to when sick and languid, they have become acquainted with most of the simples in use among them, either in the way of internal medicine, or external application. But what will appear somewhat more singular, is, they acknowledge the bears likewise for their dancing masters. Indeed, the evidence of one's senses puts this out of dispute; for the bear-dance of the Kamtschadales is an exact counterpart of every attitude and gesture peculiar to this animal, through its various functions; and this is the foundation and ground-work of all their other dances, and what they value themselves most upon.

I returned to the ships on the 28th, very well pleased with my excursion, as it had afforded me an opportunity of seeing a little more of the country, and of observing the manners and behaviour of the Kamtschadales, when freed from that constraint, which they evidently lie under in the company of the Russians.

1779.
September.
Tuesday 28.

No occurrence worth mentioning took place till the 30th, when Captain Gore went to Paratounca, to put up in the church there an escutcheon, prepared by Mr. Webber, with an inscription upon it, setting forth Captain Clerke's age and rank, and the object of the expedition in which he was engaged at the time of his decease. We also affixed to the tree, under which he was buried, a board, with an inscription upon it to the same effect.

Thursday 30.

Before his departure, Captain Gore left orders with me to get the ships out of the harbour into the bay, to be in readiness to sail. We were prevented from doing this, by a violent gale of wind, which lasted the whole day of the first of October. However, on the 2d, both ships warped out of the harbour, clear of the narrow passage, and came to anchor in seven fathoms, a quarter of a mile from the *ostrog*.

October.
Friday 1.
Saturday 2.

The day before we went out of the harbour, the cattle arrived from Verchnei; and that the men might receive the full benefit of this capital and much-longed-for supply, by consuming it fresh, Captain Gore came to a determination of staying five or six days longer. Nor was this time idly employed. The boats, pumps, sails, and rigging, of both ships, thereby received an additional repair. And Captain Gore, sparing me some molosses, and the use of the Resolution's copper, I was enabled to brew a fortnight's beer for

the

1779.
October.

the crew, and to make a farther provision of ten puncheons of strong spruce essence. The present supply was the more acceptable, as our last cask of spirits, except a small quantity left in reserve for cases of necessity, was now serving out.

Sunday 3.

The 3d was the name-day of the Empress; and we could want no inducement to shew it every possible respect. Accordingly Captain Gore invited the Priest of Paratounca, Ivaskin, and the Serjeant, to dinner; and an entertainment was also provided for the inferior officers of the garrison, for the two *Toions* of Paratounca, and St. Peter and St. Paul, and for the other better sort of Kamtschadale inhabitants. The rest of the natives, of every description, were invited to partake with the ships companies, who had a pound of good fat beef served out to each man; and what remained of our spirits was made into grog, and divided amongst them. A salute of twenty-one guns was fired at the usual hour; and the whole was conducted (considering the part of her dominions it was in) in a manner not unworthy so renowned and magnificent an Empress.

Tuesday 5.

On the 5th, we received, from Bolcheretsk, a fresh supply of tea, sugar, and tobacco. This present had met Captain Shmaleff on his return, and was accompanied by a letter from him, in which he informed us, that the sloop from Okotsk had arrived during his absence, and that Madame Shmaleff, who was entirely in our interests, had lost no time in dispatching a courier, with the few presents, of which our acceptance was requested.

Friday 8.

The appearance of foul weather, on the 6th and 7th, prevented our unmooring; but on the morning of the 8th, we sailed out toward the mouth of the bay, and hoisted in all
the

the boats; when the wind, veering to the Southward, stopped our farther progress, and obliged us to drop anchor in ten fathoms; the *ostrog* bearing due North, half a league distant.

1779.
October.

The weather being foggy, and the wind from the same quarter during the forenoon of the 9th, we continued in our station. At four in the afternoon, we again unmoored; but whilst we were, with great difficulty, weighing our last anchor, I was told that the drummer of the marines had left the boat, which had just returned from the village, and that he was last seen with a Kamtschadale woman, to whom his messmates knew he had been much attached, and who had often been observed persuading him to stay behind. Though this man had been long useless to us, from a swelling in his knee, which rendered him lame, yet this made me the more unwilling he should be left behind, to become a miserable burthen, both to the Russians and himself. I therefore got the serjeant to send parties of soldiers, in different directions, in search of him, whilst some of our sailors went to a well known haunt of his in the neighbourhood, where they found him with his woman. On the return of this party, with our deserter, we weighed, and followed the Resolution out of the bay.

Saturday 9.

Having at length taken our leave of St. Peter and St. Paul, I shall conclude this chapter with a particular description of Awatska bay, and the coast adjoining; not only because (its three inlets included) it constitutes perhaps the most extensive, and safest, harbour that has yet been discovered; but because it is the only port in this part of the world, capable of admitting ships of any considerable burthen. The term Bay, indeed, is perhaps not applicable, properly speaking,

1779.
October.

to a place so well sheltered as Awatka; but then it must be observed, that from the loose, undistinguishing manner, in which navigators have denominated certain situations of sea and land, with respect to each other, bays, roads, sounds, harbours, &c. we have no defined and determinate ideas affixed to these words, sufficient to warrant us in changing a popular name, for one that may appear more proper.

The entrance into this bay, is in $52^{\circ} 51'$ North latitude, and $158^{\circ} 48'$ East longitude, and lies in the bight of another exterior bay, formed by Cheepooniskoi Nofs, to the North, and Cape Gavareea to the South. The former of these headlands bears from the latter North East by North, three quarters East, and is distant thirty-two leagues. The coast, from Cape Gavareea to the entrance of Awatka Bay, takes a direction nearly North, and is eleven leagues in extent. It consists of a chain of high, ragged cliffs, with detached rocks frequently lying off them. This coast, at a distance, presents, in many parts, an appearance of bays or inlets, but on a nearer approach, the head lands were found connected by low ground.

Cheepooniskoi Nofs bears from the entrance of the bay, East North East a quarter East, and is seventeen leagues distant. On this side, the shore is low and flat, with hills rising behind, to a considerable height. In the latitude of Cape Gavareea, there is an error of twenty-one miles in the Russian charts; its true latitude being $52^{\circ} 21'$.

This striking difference of the land on each side Awatka Bay, with their different bearings, are the best guides to steer for it, in coming from the Southward: and, in approaching it from the Northward, Cheepooniskoi Nofs will
make

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1801. It contains a statement of the President's views on the state of the Union and the progress of the government.

2. The second part of the document is a report from the Secretary of the Treasury, dated January 1, 1801. It contains a statement of the financial condition of the United States and the progress of the government.

3. The third part of the document is a report from the Secretary of the Navy, dated January 1, 1801. It contains a statement of the naval condition of the United States and the progress of the government.

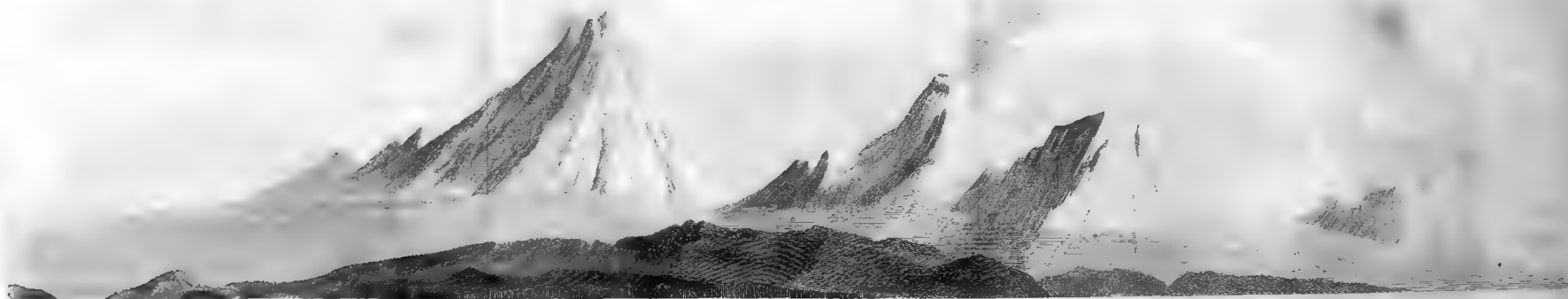


VIEW of the

Volcano AOH

W^m High del

Entrance of AWATSKA



Entrance of AWATSKA BAY

North head

from the point



Light-House

VIEW in the entrance of AWATSKA Bay when the light-House on North Head bears S.F.W.S distant 2 miles.

1779.
October.

make itself very conspicuous; for it is a high projecting head-land, with a considerable extent of level ground, lower than the Nofs, uniting it to the continent. It presents the same appearance, whether viewed from the North or South, and will warn the mariner not to be deceived, in imagining Awatska Bay to lie in the bight, which the coast forms to the Northward of this Nofs; and which might be the case, from the striking resemblance there is between a conical hill within this bight or bay, and one to the South of Awatska Bay.

I have been thus particular, in giving a minute description of this coast, from our own experience of the want of it. For had we been furnished with a tolerable account of the form of the coast, on each side of Awatska Bay, we should, on our first arrival upon it, have got safely within the bay two days before we did, and thereby have avoided part of the stormy weather, which came on when we were plying off the mouth of the harbour. Besides, from the prevalence of fogs, in these seas, it must frequently happen, that an observation for ascertaining the latitude cannot be got; to which we may add, that the deceptive appearances land makes, when covered with snow, and when viewed through an hazy atmosphere, both which circumstances prevail here, during the greatest part of the year, render the knowledge of a variety of discriminating objects the more necessary.

Should, however, the weather be clear enough to admit a view of the mountains on the coast in its neighbourhood, these will serve to point out the situation of Awatska Bay, with a great deal of precision. For to the South of it are two high mountains; that which is nearest the bay, is

VOL. III. S f shaped

1779.
October.

shaped like a sugar-loaf; the other, which is farther inland, does not appear so high, and is flat at the top. To the North of the bay, are three very conspicuous mountains; the Westernmost is, to appearance, the highest; the next is the *volcano* mountain, which may be known from the smoke that issues from its top, and likewise from some high table-hills connected with it, and stretching to the Northward: these two are somewhat peaked. The third, and the most Northerly, might perhaps be more properly called a cluster of mountains, as it presents to the sight several flat tops.

When the navigator has got within the Capes, and into the outward bay, a perpendicular headland, with a lighthouse erected upon it, will point out the entrance of the bay of Awatska to the Northward. To the Eastward of this head-land lie many sunken rocks, stretching into the sea, to the distance of two or three miles; and which will shew themselves, if there be but a moderate sea or swell. Four miles to the South of the entrance lies a small round island, very distinguishable from being principally composed of high pointed rocks, with one of them strikingly remarkable, as being much larger, more peaked and perpendicular, than the rest.

It is no way necessary to be equally particular in the description of the bay itself, as of its approaches and environs; since no words can give the mariner so perfect an idea of it, as the annexed plan. From this it will appear, that the entrance is at first near three miles wide, and in the narrowest part one mile and a half, and four miles long, in a North North West direction. Within the mouth is a noble basin of twenty-five miles circuit, with the capacious harbours of Tarcinska to the West, of Rakoweena to the East,

East, and the small one of St. Peter and St. Paul, where we lay, to the North.

1779.
October.

Tarcinfka harbour is about three miles in breadth, and twelve in length; it stretches to the East South East, and is separated from the sea, at the bottom, by a narrow neck of land. The road into this harbour is perfectly free from rocks or shoals. We had never less than seven fathoms water, as far as our survey extended; for we were not able to get to the bottom of the harbour on account of the ice.

The harbour of Rakoweena would deserve the preference over the other two, if its entrance were not impeded by a shoal lying in the middle of the channel; which, in general, will make it necessary to warp in, unless there be a leading wind. It is from one mile to half a mile in width, and three miles long, running at first in a South East, and afterward in an Easterly direction. Its depth is from thirteen to three fathoms.

St. Peter and St. Paul's is one of the most convenient little harbours I ever saw. It will hold conveniently half a dozen ships, moored head and stern; and is fit for giving them any kind of repairs. The South side is formed by a low sandy neck, exceedingly narrow, on which the *ostrog* is built; and whose point may almost be touched by ships going in; having three fathoms water close in with it. In the mid channel, which is no more than two hundred and seventy-eight feet across, there is six fathoms and a half; the deepest water within is seven fathoms; and in every part over a muddy bottom. We found some inconvenience from the toughness of the ground, which constantly broke the messenger, and gave us a great deal of trouble in getting up

1779.
October.

the anchors. There is a watering-place at the head of the harbour.

The plan will likewise point out the shoal that is to be avoided, lying off the Eastern harbour, as well as the spit within the entrance, stretching from the South West shore; and over which there is only three fathoms water. In order to steer clear of the latter, a small island, or perhaps it may rather be called a large detached rock, lying on the West shore of the entrance, is to be shut in with the land to the South of it; and, to steer clear of the former, the Three Needle Rocks, which lie on the East shore of the entrance near the light-house head, are to be kept open with the head-lands (or bluff-heads) that rise to the Northward of the first small bay, or bending, observable on the East side of the entrance. When arrived to the North of the North head-land of the Eastern harbour, the shoal is past.

In sailing into the harbour of St. Peter and St. Paul, and approaching the village, it is necessary to keep in close to the Eastern shore, in order to avoid a spit, which runs from the head-land to the South West of the town.

Before I proceed to give a table of the result of our astronomical observations at this place, it may be proper to acquaint the Reader, that the time-keeper we had on board the Resolution, which was an exact copy of that invented by Mr. Harrison, and executed by Mr. Kendal, stopped on the 27th of April, a few days before we first came into Awatska Bay. It had been always kept with the most scrupulous care during the voyage, having never been trusted for a moment into any other hands than those of Captain Cook and mine. No accident could, therefore, have happened to it, to which we could attribute its stopping; nor could it have arisen

1

from

1779.
October.

from the effects of intense cold, as the thermometer was very little below the freezing point. As soon as the discovery was made, I consulted with Captain Clerk, what course it was best to pursue; whether to let it remain as it was, intirely useles to us, for the purpose of satisfying the curious at home, where it was sure of being examined by proper judges, or suffer it to be inspected by a seaman on board, who had served a regular apprenticeship to a watchmaker in London; and appeared sufficiently knowing in the business, from his success in cleaning and repairing several watches since we had been out. The advantages we had derived from its accuracy made us extremely unwilling to be deprived of its use during the remaining part of the voyage; and that object appeared to us of much greater importance than the small degree of probability, which we understood was all that could be expected, of obtaining any material knowledge respecting its mechanism, by deferring the inspection of it. At the same time, it should be remembered, that the watch had already had a sufficient trial, both in the former voyage, and during the three years we had now had it on board, to ascertain its utility. On these considerations, we took the opportunity of the first clear day, after our arrival in Awatska Bay, of opening the watch, which was done in the Captain's cabin, and in our presence. The watchmaker found no part of the work broken; but, not being able to set it a-going, he proceeded to take off the cock and balance, and cleaned both the pivot-holes, which he found very foul, and the rest of the work rather dirty; he also took off the dial-plate; and, between two teeth of the wheel that carries the second-hand, found a piece of dirt which he imagined to be the principal cause of its stopping. Having afterward put the work together, and oiled

it

1779.
October.

it as sparingly as possible, the watch appeared to go free and well.

Having received orders the next day to go to Bolcheretfk, the time-keeper was left in the care of Mr. Bayly to compare it with his watch and clock, in order to get its rate. On my return, I was told it had gone for some days with tolerable regularity, losing only from fifteen to seventeen seconds a-day, when it stopped a second time. It was again opened, and the cause of its stopping appeared to be owing to the man having put some part of the work badly together when he first opened it. Being again adjusted, it was found to gain above a minute a day; and, in the attempt to alter the regulator and balance-spring, he broke the latter. He afterward made a new spring; but the watch now went so irregularly, that we made no farther use of it. The poor fellow was not less chagrined than we were, at our bad success; which, however, I am convinced was more owing to the miserable tools he was obliged to work with, and the stiffness his hands had contracted from his ordinary occupation, than to his want of skill.

For the satisfaction of those who may wish to have a general view of its rate of going, I have added the following table.

The first and second columns contain the dates when, and the names of the places where, its rate was observed. The third column contains the daily error of its rate, so found from mean time. The fourth column has the longitude of each place, according to the Greenwich rate; that is, calculated on a supposition that the time-keeper had not varied its rate from the time it left Greenwich. But as we had frequent opportunities of ascertaining the variation of

1779.
October.

its daily error, or finding its new rate, the fifth column has the longitude according to its last rate, calculated from the true longitude of the place last departed from. The sixth is the true longitude of the place deduced from astronomical observations made by ourselves, and compared with those made by others, whenever such could be obtained. The seventh column shews the difference between the fourth column and the sixth in space; and the eighth the same difference in time. The ninth shews the number of months and days in which the error, thus determined, had been accumulating. The difference between the fifth and sixth columns is found in the tenth, and shews the error of the time-keeper, according to its rate last found, in space; and the eleventh, the same error in time. The twelfth contains the time elapsed in sailing from the place where the rate was last taken, to the place whose longitude is last determined. The thirteenth and fourteenth contain the state of the air at the time of each observation.

As persons, unaccustomed to calculations of this sort, may find some difficulty in comprehending the nature of the table, the two following instances will more clearly explain it.

Thus, on the 24th October, 1776 (first column), at the Cape of Good Hope (second column), we found the daily error in the rate of its going, to be $2'',26$ (third column). The longitude of that place calculated on a supposition, that the rate of the time-keeper had continued the same from the time of our leaving Greenwich, that is, had a regular daily error of $1'',21$, is found to be $18^{\circ} 26' 30''$ East (fourth column). And as its rate at Greenwich is, in this instance, its latest rate, the longitude thus found is the same (fifth column).

The

1779.
October.

The true longitude of the place is $18^{\circ} 23' 15''$ (sixth column). From whence it appears, that, in our run from Greenwich to the Cape, the watch would have led us into an error only of $3' 15''$ (seventh column), or three miles one quarter; or had varied $13''$ of time (eighth column), in four months twenty-three days (ninth column), the period between our leaving Greenwich and our arrival at the Cape. As the Greenwich is the latest error, the tenth, eleventh, and twelfth columns will be the same with the seventh and ninth.

But, on the 22d of February, 1777 (first column), at Queen Charlotte's Sound, New Zealand (second column), the daily error of its rate was found to be $2'',91$ (third column). The longitude of this place, according to the Greenwich rate, is $175^{\circ} 25'$ (fourth column). But having found, at the Cape, that it had altered its rate from a daily error of $1',21$, to $2',26$, the longitude corrected by this new rate is found to be $174^{\circ} 54' 23''$ (fifth column). The true longitude of the place being $174^{\circ} 23' 31''$ (sixth column); it appears, that, in our run from Greenwich to New Zealand, the error would have been only $1^{\circ} 1' 29''$ (seventh column), or sixty-one miles and a half, even if we had not had an opportunity of correcting its daily error; or, in other words, that the watch had varied $4' 6''$ (eighth column), in eight months eleven days (ninth column). But the longitude as given by its new rate, leaves an error of only $30' 54''$ (tenth column), near thirty-one miles, or, in time, $2' 3'', 6$ (eleventh column); which has been accumulating during our run from the Cape to New Zealand, or in three months, 28° (twelfth column). The thirteenth and fourteenth columns require no explanation.

TABLE of the Rate and Error of Mr. Kendal's Watch, on board the Resolution.

I. TIME.	II. PLACE.	III. Error of daily Rate.	IV. Longitude by Greenwich Rate.	V. Longitude by new Rate.	VI. True Longitude.	VII. Accumulated Error by Greenwich Rate,		IX. Length of Time.	X. Error by new Rate,		XII. Length of Time.	XIII. Thermome- ter.	XIV. Barometer.
						in Space.	in Time.		in Space.	in Time.		Gr. Leaf Height.	
1776. June 11. Oct. 24.	Greenwich - Cape of Good Hope }	- 1,21 - 2,26	0 0 0 E. 18 26 30	0 0 0 E. 18 26 30	0 0 0 E. 18 23 15	+ 3 15 0	0 13,0	4 23	+ 0 3 15 0	0 13,04 23	84	63	30, 0
1777. Feb. 22.	Queen Char- lotte's Sound, New Zealand }	- 2,91	175 25 0	174 54 25	174 23 31	1 1 29 0	4 5,3 9	4	+ 0 30 54 0	2 3,6 4 9	73	53	30, 0
May 7.	Anamooka -	+ 0,52	186 13 26	186 13 15	185 11 18	1 2 8 0	4 8,5	11 22	+ 1 1 57 0	4 7,8 2 18	83	74	30, 1
June 7.	Anamooka -	- 0,54	186 8 28	186 12 43	185 11 18	0 57 10 0	3 48,6	12 25	+ 1 1 25 0	4 5,6 1 3	79	73	30, 15
July 1.	Tongataboo -	- 1,78	185 48 50	184 53 0	184 55 18	0 51 32 0	3 34,1	13 21	- 0 2 18 0	0 9,2 0 24	85	69	30, 15
Sept. 1.	Otaheite -	- 1,54	211 41 26	210 39 8	210 22 28	1 18 58 0	5 15,8	15 27	+ 0 16 40 0	1 6,6 2 6	90	70	30, 1
Oct. 17.	Huahaione -	- 2,50	210 14 52	208 50 24	208 52 24	1 22 28 0	5 29,8	17 17	- 0 2 00 0	0 8,0 1 18	90½	72	29, 9
Nov. 7.	Ulitea -	- 1,52	209 42 54	208 25 22	208 25 22	1 17 32 0	5 10,1	18 10	0 0 0 0	0 0,0 0 21	92	70	29, 7
1778. April 16.	Nootka -	- 7, 0	235 32 45	233 56 0	233 17 8	2 15 27 0	9 1,8	24 2	+ 0 28 42 0	2 34,8 5 20	65	41	30, 0
Oct. 14.	Samanganoodha	- 8, 8	197 44 15	193 12 35	193 31 20	4 12 55 0	16 51,6	30 15	- 0 18 45 0	1 15,0 6 13	57	36	30, 15
1779. Feb. 2.	Owhyhee -	- 9, 6	214 7 35	203 37 22	204 0 0	10 7 35 0	40 30,3	34 14	- 0 22 38 0	1 30,5 3 27	88	70	29, 8
May 1.	Saint Peter and Kamtchatka }	T. K. flopt	173 36 0	159 20 0	158 43 16	14 52 44 0	59 30,9	37 18	- 0 36 44 0	2 16,9 3 4			

1779.
October.

From this view of the time-keeper it appears, that, for near two years, it altered its rate very inconsiderably, and therefore, that its error, according to the Greenwich rate, if we had had no opportunities of correcting it, would have amounted only to $2\frac{1}{4}^{\circ}$. That afterward, at King George's Sound, or Nootka, it was found to have varied exceedingly; of course, the longitude, by its Greenwich rate, was becoming considerably erroneous. About this time, it should be remarked, the thermometer was varying from 65° to 41° . The greatest alteration we ever observed in the watch was, during the three weeks we were cruising to the North; in which interval, it gave the longitude of the East Cape with a difference of twenty-eight miles. I have marked the longitude of Saint Peter and Saint Paul, as given by the time-keeper, notwithstanding it stopped a few days before we arrived there; this I was enabled to do, from comparing the longitude it gave the day before it stopped, with that given by Mr. Bayley's watch, and allowing for the error of the latter.

The use of so accurate a measure of time is sufficiently evident, from its furnishing in itself the means of approximating to the longitude at sea, as may be seen in the above table. But, besides this, we were enabled, by the same means, to give a degree of accuracy to the lunar observations, which they cannot otherwise pretend to; and, at the same time, by reducing a number of those observations to one time, obtain results approaching still nearer the truth. In surveying coasts, and ascertaining the true positions of capes and head-lands, it reaches the utmost degree of practical exactness. On the other hand, it is to be observed, that lunar observations, in their turn, are absolutely necessary, in order to reap the greatest possible advantages from the time-keeper;

1779.
October.

keeper; since, by ascertaining the true longitude of places, they discover the error of its rate. The original observations, that were made in the course of this voyage, have been published by order of the board of longitude, and to those I must refer the reader, for his further information on this subject.

N. B. The observatories were placed on the West side of the village of Saint Peter and Saint Paul.

Latitude deduced from meridian zenith
distances of the sun, and of five stars
to the South, and five to the North of
the zenith - - - $53^{\circ} 0' 38''$ North.

Longitude deduced from one hundred
and forty-six sets of lunar observa-
tions - - - $158^{\circ} 43' 16''$ East.

Longitude by time-keeper, according to
its Greenwich rate - - - $173^{\circ} 36' 0''$.

Longitude by time-keeper, according
to its rate found at Owhyhee - - - $159^{\circ} 20' 0''$

Variation of the compass, by azimuths
taken with three compasses, made by
Knight, Gregory, and Martin - - - $6^{\circ} 18' 40''$ East.

Dip of the North pole of the mag-
netic needle, being a mean of the
observations taken in June and Sep-
tember - - - $63^{\circ} 5' 0''$

It was high water, on the full and change of the moon,
at thirty-six minutes past four, and the greatest rise was

1779.
October.

five feet eight inches. The tides were very regular every twelve hours. On the coast, near the bay, the flood came from the South, and the time of high-water was near two hours sooner than in the harbour of Saint Peter and Saint Paul.

CHAP. VI.

General Account of Kamtschatka.—Geographical Description. — Rivers. — Soil. — Climate. — Volcanos. — Hot Springs.—Productions.—Vegetables.—Animals.—Birds.—Fishes.

KAMTSCHATKA is the name of a peninsula situated on the Eastern coast of Asia, running nearly North and South, from 52° to 61° North latitude; the longitude of its Southern extremity being $156^{\circ} 45'$ East. The isthmus, which joins it to the continent on the North, lies between the Gulf of Olutorfk and the Gulf of Penshinsk. Its Southern extremity is Cape Lopatka, a word signifying the blade-bone of a man, and is so called from its supposed resemblance to it. The shape of the whole peninsula is not unlike that of a shoe, widening from the toe (which we may suppose to be Cape Lopatka) toward the middle, and narrowing again toward the heel, the neck of land above-mentioned connecting it with the continent. Its greatest breadth is from the mouth of the river Tigil to that of Kamtschatka, and is computed to be two hundred and thirty-six miles, from whence it narrows very gradually toward each extremity.

1779.
October.

It is bounded on the North by the country of the Koriacks; to the South and East, by the North Pacific Ocean; and to the West, by the sea of Okotfk. A chain of high mountains stretches the whole length of the country, from
North

1779.
October.

North to South, dividing it nearly into two equal parts, from whence a great number of rivers take their rise, and empty themselves, on each side, into the Pacific Ocean and the sea of Okotfk.

There are three rivers of much greater magnitude than the rest; the Bolchoireka, or great river, so called from *bolchoia*, which signifies great, and *reka*, a river; the river Kamtschatka, and the Awatka. The first empties itself into the sea of Okotfk, and is navigable, for the Russian gallies, upward of five leagues from its mouth, or within nine miles of Bolcheretsk, a town situated at the conflux of the Goltsoffka and the Bistraia, which here lose themselves in the Bolchoireka. The Bistraia itself is no inconsiderable river. It derives its source from the same mountain with the river Kamtschatka, and, by taking a direct contrary course, affords the Kamtschadales the means of transporting their goods by water, in small canoes, almost across the whole peninsula. The river Kamtschatka, after maintaining a course of near three hundred miles from South to North, winds round to the Eastward, in which direction it empties itself into the ocean, a little to the Southward of Kamtschatkoi Nofs. Near the mouth of the Kamtschatka, to the North West, lies the great lake called Nerpitsch, from *nerpi*, a Kamtschadale word signifying a seal, with which this lake abounds. About twenty miles up the river, reckoning from the mouth of the lake, is a fort called Nishnei Kamtschatska *oslog*, where the Russians have built an hospital and barracks, and which, we were informed, is become the principal mart in this country.

The river Awatka arises from the mountains situated between the Bolchoireka and the Bistraia, and running, from

North West to South East, a course of one hundred miles, falls into the bay of Awatska. The Tigil is likewise a river of considerable size, rising amidst some very high mountains, which lie under the same parallel with Kamtschatkoi Nofs, and running, in an even course from South East to North West, falls into the sea of Okotsk. All the other rivers of this peninsula, which are almost infinite in number, are too small to deserve a particular enumeration.

1779.
October.

If I may judge of the soil, from what I saw of its vegetable productions, I should not hesitate in pronouncing it barren in the extreme. Neither in the neighbourhood of the bay, nor in the country I traversed on my journey to Bolcheretsk, nor in any of our hunting expeditions, did I ever meet with the smallest spot of ground that resembled what in England is called a good green turf; or that seemed as if it could be turned to any advantage, either in the way of pasturage, or other mode of cultivation. The face of the country in general was thinly covered with stunted trees, having a bottom of moss, mixed with low weak heath. The whole bore a more striking resemblance to Newfoundland, than to any other part of the world I had ever seen.

It must however be observed, that I saw at Paratounca three or four stacks of sweet and very fine looking hay; and Major Behm informed me, that many parts of the peninsula, particularly the banks of the river Kamtschatka and the Bistraia, produce grass of great height and strength, which they cut twice in the summer; and that the hay is of a succulent quality, and particularly well adapted to the fattening of cattle. Indeed it should appear, from the size and fatness of the thirty-six head that were sent down to us, from the Verchnei *gstrog*, and which, we were told, were bred

1779-
October.

bred and fattened in the neighbourhood, that they must have had the advantage of both good pastures and meadows. For it is worth our notice, that the first supply we received, consisting of twenty, came to us just at the close of the winter, and before the snow was off the ground, and therefore probably had tasted nothing but hay for the seven preceding months. And this agrees with what is related by Kraschenicoff, that there is no part of the country equal in fertility to that which borders on the River Kamtschatka; and that to the North and South it is much inferior both in point of soil and climate. He relates, that repeated experiments have been made in the culture of oats, barley, and rye, in different quarters near this river, which have generally succeeded; that, in particular, some persons belonging to the convent of Jakutsk, who had settled in that part of the country, had sown barley there, which had yielded an extraordinary increase; and he has no doubt but that wheat, in many parts, particularly near the source of the Bistraia and Kamtschatka, would grow as well as in the generality of countries situated in the same latitude. Perhaps the superior fertility of the country here spoken of may, in a great measure, be accounted for, from its lying in that part of the peninsula, which is by much the widest, and consequently farthest removed from the sea, on each side. The moist chilling fogs, and drizzling weather, which prevail almost perpetually along the coast, must necessarily render the parts adjacent very unfit for all the purposes of agriculture.

It is natural to suppose, that the severity of the climate must be in due proportion to the general sterility of the soil, of which it is probably the cause. The first time we saw this country was in the beginning of May, 1779, when the whole face of it was covered with snow, from six to eight feet deep.

On

1779.
October.

On the 6th, we had snow, with the wind from the North East. On the 8th of May, at noon, the thermometer stood at 32° ; and, the same day, some of our men were sent on shore to try to cut wood; but the snow was still so deep on the ground, as to render all their attempts fruitless. Nor was it found practicable to proceed in this necessary business, with all the efforts of a very stout party, till the 12th, at which time, the thaw began to advance gradually. The sides of the hills were now in some places free from snow; and, by the beginning of June, it was generally melted from the low lands. On the 15th of June, the day we sailed out of the harbour, the thermometer had never risen higher than 58° , nor the barometer than $30^{\circ} 04'$. The winds blew almost invariably from the Eastward during our stay, and the South East was more prevalent than any other.

On our return, the 24th of August, the foliage of the trees, and all other sorts of vegetation, seemed to be in the utmost state of perfection. For the remainder of this month, and through September, the weather was very changeable, but in no respect severe. The winds, at the beginning of the month, were, for the most part, Easterly, after which they got round to the West. The greatest height of the thermometer was 65° , the lowest 40° . The barometer's greatest height 30° ; its lowest $29^{\circ} 3'$. So that, upon the whole, during this month, an equal and moderate degree of temperature prevailed. But at the beginning of October, the tops of the hills were again covered with new-fallen snow, the wind continuing Westerly.

In computing the seasons, the spring ought certainly not to be taken into the account. From the middle of June, to the middle of September, may be properly said to constitute

1779.
October.

the summer, October may be considered as an autumnal month, from thence, till the middle of June, it is perfect winter. It was toward the end of May that we made our journey, between Bolcheretsk and Awatska, over the snow in sledges.

It is said that the climate, in the country adjoining to the river Kamtschatka, is not less serene and temperate, than in many parts of Siberia that are under the same latitude. This variation is probably owing to the same causes, to which the superior fertility of the soil in those parts has been before attributed. But it is not in the sterility of the ground alone that the Kamtschadales feel the unfavourable temperature of their climate. The uncertainty of the summer season sometimes prevents their laying up a sufficient stock of dried fish for their winter's provision, and the moisture of the air causes worms to breed in them, which not unfrequently destroy the greatest part.

I do not remember that we had either thunder or lightning during our stay, excepting on the night of the eruption of the *volcano*; and, from the account of the inhabitants, they are very seldom troubled with storms of this kind, and never but in a slight degree. The general severity of the winter, as well as the dreadful hurricanes of wind and snow that season brings along with it, cannot be questioned, from the subterraneous habitations the natives are under a necessity of retiring to, for warmth and security. Major Behm told us, that the cold and inclemency of the winter of 1779 was such, that, for several weeks, all intercourse between the inhabitants was entirely stopped, every one being afraid to stir even from one house to another, for fear of being frost-bitten. This extraordinary rigour of climate, in so low
a la-

a latitude, may be accounted for, from its being situated to the East of an immense uncultivated tract of country, and from the prevalence of the Westerly winds, blowing over so extensive and cold a continent. The extraordinary violence and impetuosity of the winds, is attributed to the subterraneous fires, the sulphureous exhalations, and the general volcanic disposition of the country.

1779.
October.

This peninsula abounds in *volcanos*, of which only three have, for some time past, been subject to eruptions. We have already mentioned that which is situated in the neighbourhood of Awatka. Besides this, there are others not less remarkable, according to the account given of them by Krascheninicoff.

The *volcano* of Tolbatchick is situated on a neck of ground between the River of Kamtschatka and Tolbatchick. The mountain, from the summit of which the eruptions proceed, is of a considerable height, and terminates in pointed rocks. In the beginning of the year 1739, there issued from it a whirlwind of flames, which reduced to ashes the forests of the neighbouring mountains. This was succeeded by a cloud of smoke, which spread over, and darkened the whole country, till it was dissipated by a shower of cinders, that covered the ground to the distance of thirty miles. Mr. Krascheninicoff, who was at this time on a journey from Bolchoireka to the Kamtschatka *ostrog*, at no great distance from the mountain, relates, that the eruption was preceded by an alarming sound in the woods, which he thought the forerunner of some dreadful storm or hurricane, till three shocks of an earthquake, at about a minute's interval each, convinced him of its real cause; but that he was hindered from approaching nearer the mountain, by the cin-

1779.
October.

ders that fell, and prevented him from proceeding on his journey.

The third *volcano* is on the top of the mountain of Kamtschatka, which is mentioned as by far the highest in the peninsula. A thick smoke never ceases to ascend from its summit, and it has frequent eruptions, of the most violent and dreadful kind, some of which were much talked of, and seemed to be fresh in the memories of the Kamtschadales.

The country is likewise said to contain numerous springs of hot water. The only one that I had an opportunity of seeing was at Natchikin *ostrog*, and hath been already described. Krascheninicoff makes mention of several others, and also of two very extraordinary pits or wells, at the bottom of which the water is seen to boil as in a caldron, with prodigious force and impetuosity; at the same time a dreadful noise issues out of them, and so thick a vapour, that a man cannot be seen through it.

Of the trees which fell under our notice, the principal are the birch, the poplar, the alder (with the bark of which they stain their leather), many species of the willow, but all small; and two sorts of dwarfish pines or cedars *. One of these grows upon the coast, creeping along the ground, and seldom exceeds two feet in height. It was of this sort we made our essence for beer, and found it excellent for the purpose. The other grows on the mountains, to a greater height, and bears a small nut or apple. We were told by the old *Toion* at St. Peter and St. Paul, that Beering, during

* Krascheninicoff says, that the tree here spoken of, is a dwarf cedar, for that there is not a pine in the peninsula.

1779.
October.

the time he lay in that harbour, first taught them the use of the decoction of these pines, and that it had proved a most excellent remedy for the scurvy; but, whether from the great scarcity of sugar, or from what other cause, we could not learn, we were sorry to find, that it was no longer in use amongst them.

The birch was by far the most common tree we saw; and of this we remarked three sorts. Two of them fit for timber, and differing only in the texture and colour of the bark; the third of a dwarfish kind. This tree is applied to a great variety of uses by the inhabitants. The liquor which, on tapping, it yields in great abundance, they drink without mixture, or any preparation, as we had frequent opportunities of observing, upon our journey to Bolcheretsk; and found it, ourselves, pleasant and refreshing, but somewhat purgative. The bark they convert into vessels, for almost all their domestic and kitchen purposes; and it is of the wood of this tree the sledges and canoes are also made*.

The birch, and every other kind of tree in the neighbourhood of the bay, were small and stunted; and they are obliged to go many miles up into the country, for wood of a proper size to work into canoes, for the principal timbers of their *balagans*, and the like uses.

Besides the trees above mentioned, Krascheninoff relates, that the larch grows on the banks of the River Kamtschatka, and of those that fall into it, but nowhere else; and that there are firs in the neighbourhood of the River Bere-

* Krascheninoff says, that the natives likewise convert the bark into a pleasant wholesome food, by stripping it off whilst it is young and green, and cutting it into long narrow stripes, like *vermicelli*, drying it, and stewing it afterward along with their *caviar*.

1779.
October.

zowa ; that there is likewise the service-tree (*padus foliis annuis*) ; and two species of the white-thorn, one bearing a red, the other a black berry.

Of the shrub kind, as junipers, the mountain-ash, wild rose-trees, and raspberry-bushes, the country produces great abundance ; together with a variety of berries ; blue-berries of two sorts, round and oval ; partridge-berries ; cran-berries ; crow-berries, and black-berries. These the natives gather at proper seasons, and preserve, by boiling them into a thick jam, without sugar. They make no inconsiderable part of their winter provisions, and are used as sauce to their dried and salt fish ; of which kind of food they are unquestionably excellent correctives. They likewise eat them by themselves, in puddings, and various other ways, and make decoctions of them for their ordinary liquor.

We met with several wholesome vegetables in a wild state, and in great quantities, such as wild celery, *angelica*, chervil, garlic, and onions. Upon some few patches of ground in the vallies, we found excellent turnips, and turnip-radishes. Their garden cultivation went no farther ; yet from hence I am led to conclude, that many of the hardy sorts of vegetables (such at least as push their roots downward), like carrots, parsnips, and beet, and perhaps potatoes, would thrive tolerably well. Major Behm told me, that some other sorts of kitchen vegetables had been tried, but did not answer ; that neither any of the cabbage or lettuce kind would ever head ; and that pease and beans shot up very vigorous stalks, flowered and podded, but the pods never filled. He likewise told me, that in the experiments made by himself at Bolcheretzk, with different sorts of farinaceous grain, there generally came up a very high

and strong blade, which eared, but that the ears never yielded flour.

1779.
October.

This short account of the vegetable productions reaches to such parts of the country only as fell within our notice. In the neighbourhood of the Kamtschatka River, where (as has been observed, both the soil and climate is by much the best in the whole peninsula, garden culture is attended to, and probably with great success, as appears from our having received at the same time, with the second drove of cattle from Verchnei, a present of cucumbers, of very large fine turnips, celery, and some other garden-stuff, of which I do not recollect the kinds.

There are two plants, which, from the great use made of them, merit a particular mention and description. The first is called by the natives the *farana*; and by botanists, *Lilium Kamtskatiense flore atro rubente* *. The stem is about the thickness of that of the tulip, and grows to the height of five inches, is of a purple colour toward the bottom, and green higher up, and hath, growing from it, two tier of leaves of an oval figure, the lower consisting of three leaves, the uppermost of four, in the form of a cross: from the top of the stalk grows a single flower, of an exceedingly dark red colour, in shape resembling the flower of the narcissus, only much smaller: from the centre of the flower, rises a style of a triangular form, and obtuse at the end, which is surrounded by six white *stamina*, whose extremities are yellow. The root is of the bulbous kind, and resembles, in shape, that of garlic, being much of the same size, but rounder, and having, like that, four or five cloves hanging together. The

* Gmelin, p. 41. Steller enumerates five different species of this plant.

plant:

1779.
October.

plant grows wild, and in considerable abundance: the women are employed in collecting the roots at the beginning of August, which are afterward dried in the sun, and then laid up for use. On our second arrival, this harvest was just over, and had fallen much short of its usual produce. It is a common observation, amongst the Kamtschadales, that the bounty of Providence never fails them, for that such seasons as are most hurtful to the *farana*, are always the most favourable for fishing; and that, on the contrary, a bad fishing month is always made up by the exuberance of the *farana* harvest. It is used in cookery in various ways. When roasted in embers, it supplies the place of bread, better than any thing the country affords. After being baked in an oven, and pounded, it becomes an excellent substitute for flour and meal of every sort, and in this form is mixed in all their soups, and most of their other dishes. It is esteemed extremely nourishing; has a pleasant bitter taste, and may be eaten every day without cloying. We used to boil these roots, and eat them as potatoes, either alone, or with our meat, and found them very wholesome and pleasant. It has been already mentioned, that this useful plant grows also at Oonalashka, where the roots of it are used, and constitute a considerable part of their food, in like manner as in Kamtschatka.

The other plant alluded to is called the *sweet grass*; the botanical description is *Heracleum Sibericum foliis pinnatis, foliolis quinis, intermediis sessilibus, corollulis uniformibus*. Hort. Upsal. 65. The time, I took particular notice of it, was in May, when it was about a foot and a half high, had much the appearance of sedge, and was covered with a white down, or dust, which looked exceedingly like the hoar-frost hanging upon it,

1779.
October.

it, and might be rubbed off: it tasted as sweet as sugar; but was hot and pungent. The stalk is hollow, and consists of three or four joints; from each of which arise large leaves, and, when at its full growth, is six feet high.

This plant was formerly a principal ingredient in the cookery of most of the Kamtschadale dishes; but since the Russians got possession of the country, it has been almost intirely appropriated to the purpose of distillation. The manner in which it is gathered, prepared, and afterward distilled, is as follows: having cut such stalks as have leaves growing on them, of a proper age (the principal stem, by the time the plant has attained its full growth, having become too dry for their purpose), and scraped off with shells the downy substance on their surface, they are laid in small heaps, till they begin to sweat and smell. On growing dry again, they put them into sacks made of matting; where, after remaining a few days, they are gradually covered with a sweet saccharine powder, which exudes from the hollow of the stalk. From thirty-six pounds of the plant, in this state, they obtain no more than a quarter of a pound of powder. The women, whose province it is to collect and prepare the materials, are obliged to defend their hands with gloves whilst they are scraping the stalks, the rind they remove being of so acrid a quality, as to blister, and even ulcerate whatever it touches.

The *spirit* is drawn from the plant in this state by the following process. After steeping bundles of it in hot water, they promote its fermentation in a small vessel, by the help of berries of the *gimolost* *, or of the *golubitza* †, being careful

* *Lonicera pedunculis bifloris, floribus infundibili formis, bacca solitaria, oblonga, angulosa.* Gmel. Flor. Sib.

† *Myrtillus grandis cæruleus.*

1779.
October.

to close up well the mouth of the vessel, and to keep it in a warm place whilst the fermentation is going on, which is generally so violent as to occasion a considerable noise, and to agitate the vessel in which it is contained. After drawing off this first liquor, they pour on more hot water, and make a second in the same manner. They then pour both liquor and herbs into a copper still, and draw off the spirit after the usual method. The liquor, thus obtained, is of the strength of brandy; and is called by the natives *raka*. Two pood (seventy-two pounds) of the plant yield generally one *vedro* (twenty-five pints) of *raka*.

Steller says, that the spirit distilled from this plant, unscrapped, is exceedingly prejudicial to the health, and produces the most sudden and terrible nervous effects.

Besides these, Krascheninicoff mentions a variety of other plants, from whence the inhabitants prepare several decoctions; and which being mixed with their fish, make palatable and wholesome ragouts. Such as the *kipri**, with which is brewed a pleasant common beverage; and, by boiling this plant and the *sweet herb* together, in the proportion of one to five of the latter, and fermenting the liquor in the ordinary way, is obtained a strong and excellent vinegar. The leaves of it are used instead of tea; and the pith is dried and mixed in many of their dishes; the *morkovai* †, which is very like *angelica*; the *kotkorica* ‡, the root of which they eat indifferently, green or dried; the *ikoum* §; the *utchichlei* ||, which is much eaten with fish: with many others.

* *Epilobium*.

† *Tradescantia fructu molli edulo*.

|| *Jacelca foliis cannabis*. Steller.

† *Chærophyllum feminibus levibus*.

§ *Biflorta foliis ovatis, oblongis, acuminate*.

It is said, that the Kamtschadales (before their acquaintance with fire-arms), poisoned their spears and arrows with the juice of the root of the *zgate* *; and that wounds inflicted by them are equally destructive to land and marine animals. The Tschutski are reported to use the same drug for this purpose at present.

1779.
October.

I shall conclude this part of the natural history of Kamtschatka with an account, from the same author, of three plants, which furnish the materials of all their manufactures. The first is the *triticum radice perenni spiculis binis lanuginosis* †, which grows in abundance along the coast. Of the straw of this grass they make a strong sort of matting, which they use not only for their floors, but for sacks, bed-cloths, curtains, and a variety of other domestic purposes. Of the same materials they also make very neat little bags and baskets, of different forms, and for various uses.

The plant called *bolotnaia*, which grows in the marshes, and resembles *cyperoides*, is gathered in the autumn, and carded like wool, with a comb made of the bones of the sea-swallow; with this, in lieu of linen and woollen clothes, they swath their new-born infants, and use it for a covering next the skin whilst they are young. It is also made into a kind of wadding, and used for the purpose of giving additional warmth to various parts of their clothing.

There remains still a vulgar and well-known plant, which, as it contributes more effectually to their subsistence than all the rest put together, must not be passed over in silence. This is the nettle; which, as the country produces neither hemp nor flax, supplies the materials, of which are

* *Anemonoides et ranunculus*.

† Gmel. Sib. Tom. i. p. 119. Tab. XXV.

1779.
October.

made their fishing-nets ; and without which they could not possibly subsist. For this purpose they cut it down in August ; and, after hanging it up in bundles in the shade, under their *balagans*, the remainder of the summer, treat it like hemp. They then spin it into thread with their fingers, and twist it round a spindle ; after which they twine several threads together, according to the different purposes for which it may be designed.

Though there is little doubt but that many parts of this peninsula would admit of such cultivation as might contribute considerably to the comfort of the inhabitants, yet its real riches must always consist in the number of wild animals it produces ; and no labour can ever be turned to so good account as what is employed upon their furrieries. The animals, therefore, which supply these, come next to be considered : and these are the common fox ; the stoat, or *ermine* ; the *zibeline*, or sable ; the *isatis*, or arctic fox ; the varying hare ; the mountain rat, or earless marmot ; the weasel ; the glutton, or *wolverene* ; the *argali*, or wild sheep ; rein-deer ; bears ; wolves ; dogs.

The fox* is the most general object of the chase ; and they are found in great numbers, and of variety of colours. The most common is the same in species with the European, with this variation, that the colours are more bright and shining ; some are of a dark chesnut, others are striped with dark-coloured bars ; others have the belly black, and the rest of the body of a light chesnut. Some again are of a very dark brown ; some black ; others of a stone colour ; and there are a few quite white ; but these last are very scarce. Their fur is exceedingly thick and fine, and of a

* *Canis vulpes.*

quality much superior to those either of Siberia or America. A variety of artifices are made use of by the hunters to catch this animal, which, in all climates, seems to preserve the same character of craftiness and cunning. Traps of different sorts, some calculated to fall upon them, others to catch them by the feet, others by the head, are amongst the most common; to which may be added, several ingenious contrivances for taking them in nets. Poisoned baits are likewise in use; and the *nux vomica* is the drug principally employed for this purpose. Before their knowledge of the Russians, by which they became acquainted with fire-arms, they also carried bows and arrows to the chase. But since that period, almost every Kamtschadale is provided with a rifle-barrel gun; and, though far from being dextrous in the use of it, its superiority over the former instruments he is ready to acknowledge.

1777.
October.

The fables* of Kamtschatka are said to be considerably larger than those of Siberia, and their fur much thicker and brighter, though not of so good a black as those in the neighbourhood of the Olekma and the Vitime†, a circumstance which depreciates their value much more than their superiority in other respects enhances it. The fables of the Tigil and Ouka are counted the best in Kamtschatka; and a pair of these sometimes sell for thirty roubles (five pounds sterling). The worst are those of the Southern extremity. The apparatus of the fable hunters consist of a rifle-barrel gun of an exceedingly small bore, a net, and a few bricks: with the first they shoot them when they see them on the trees; the net is to surround the hollow trees in which, when pur-

* *Mustela zibellina*.

† Rivers emptying themselves into the Lena, near its source.

1779.
October.

fued, they take refuge ; and the bricks are heated, and put into the cavities, in order to smoke them out.

I must refer the Reader for an account of the *isatis* *, or arctic fox, to Mr. Pennant's Arctic Zoology, as I never saw either the animal or the skin, which I understand they set no value upon. The varying hare † is also neglected on the same account. They are in great abundance ; and, as is always the case with this species, turn quite white during the winter. Our shooting parties saw several of this colour the beginning of May, but found them so shy, that they were not able to get within gun-shot.

The mountain-rat, or earless marmot ‡, is a beautiful little animal, considerably smaller than a squirrel, and, like it, feeds upon roots, berries, the cedar-apple, &c. which it eats sitting upon its hind-legs, and holding them up to its mouth with the paws. Its skin is much valued by the Kamtschadales, is both warm and light, and of a bright shining colour, forming, like the plumage of some birds, various colours when viewed in different lights.

The stoat, or *ermine* §, is here held in no estimation, and, consequently, never engages the attention of the hunters, because, as I have heard, its fur is of an ordinary kind. I saw many of these little animals running about ; and we bought several of their skins, which were of a bad white, and of a dirty yellow toward the belly. The common weasel || is also neglected, and for the same reason.

On the contrary, the skin of the glutton, or *wolverene* ¶, is here in the highest repute ; insomuch, that a Kamtscha-

* *Canis caespus.*

§ *Mustela erminia.*

† *Lepus timidus.*

|| *Mustela nivalis.*

‡ *Mus citellus.*

¶ *Ursus luscus.*

dale looks upon himself as most richly attired, when a small quantity of this fur is seen upon him. The women adorn their hair with its pats, which are white, and considered as an extraordinary piece of finery; and they have a superstitious opinion, that the angels are clad with the skins of those animals. It is said, that this creature is easily tamed, and taught a number of pleasant tricks*.

1779.
October.

Having already had occasion to speak as fully as my own knowledge enables me of the bears, and the method of killing them, I shall only here observe, that all those I saw were of a dun brown colour; that they are generally seen in companies of four or five together; that the time they are most abroad is during the season that the fish (which is their principal food) are pushing up from the sea into the rivers, and that they are seldom visible in the winter months†.

Their skins are exceedingly useful. They make both excellent warm matrafles, and coverings for their beds; comfortable bonnets and gloves, and good collars for the dogs harness. Their flesh, and particularly the fat, is considered as great delicacies.

The wolves are only seen in the winter; at which season they prowl about, as I was told, in large companies, in search of prey.

* Krascheninicoff relates, that this small animal frequently destroys deer, and the wild mountain-sheep, in the following way: they scatter at the bottom of trees bark and moss, which those animals are fond of; and whilst they are picking it up, drop suddenly upon them, and fastening behind the head, suck out their eyes.

† The Koriacks make use of a very simple method of catching bears. They suspend, between the forks of a tree, a running noose, within which they fasten a bait, which the animal, endeavouring to pull away, is caught sometimes by the neck, and sometimes by the paw.

1779:
October.

There are rein-deer, both wild and tame, in several parts of the peninsula, but none in the neighbourhood of Awatska. It is somewhat singular, that this nation should never have used the rein-deer for the purposes of carriage, in the same manner as their neighbours, both to the North and the Eastward. Their dogs, indeed, seem fully sufficient for all the demands of the natives in their present state; and the breed of Russian horses will, probably, increase with the future necessities of the country. But when it is recollected, that the use of dogs, in a great measure, precludes them from the advantage of bringing up any other domestic animals, it will appear the more extraordinary, that they should not have adopted the services of an animal so much more gentle as well as powerful.

The *argali*, or wild mountain-sheep*, an animal, I believe, unknown in Europe (except in Corsica and Sardinia), is here in great plenty. Its skin is like the deer's, but in gait and general appearance, it partakes more of the goat. It has two large twisted horns, sometimes weighing, when at full growth, from twenty-five to thirty pounds, which, in running, it rests upon its back. These creatures are exceedingly nimble and swift, haunt only the most craggy and mountainous parts, and make their way among the steepest rocks with an agility that is astonishing. The natives work their horns into spoons, and small cups and platters; and have frequently one of a smaller size hanging to a belt, which serves them to drink out of in their hunting expeditions. This animal is gregarious. I frequently tasted the flesh of them, and thought it had a very sweet and delicate flavour; but never had an opportunity of seeing one

* *Capra ammon.*

alive. I must, therefore, refer the Reader for a particular description of this beautiful animal (for such it is said to be), to the Memoirs of the Academy of Petersburg, Tom. iv. tab. xiii.

1779.
October.

I have already observed, that the dogs of this country are, in shape and mien, exceedingly like the Pomeranian, with this difference, that they are a great deal larger, and the hair somewhat coarser. They are of a variety of colours; but the most general is a light dun, or dirty cream-colour. Toward the end of May, they are all turned loose, and left to provide for themselves through the summer, being sure to return to their respective homes when the snow begins to fall. Their food, in the winter, consists intirely of the head, entrails, and back bones of salmon; which are put aside, and dried for that purpose; and with this diet they are fed but sparingly. The number of dogs must needs be very great, since five are yoked to a sledge, and a sledge carries but one person; so that, on our journey to Bolcheretsk, we required no fewer than an hundred and thirty-nine, at the two stages of Karatchin and Natchikin. It is also to be remarked, that they never make use of bitches for the draft, nor dogs, but those that are cut. The whelps are trained to this business, by being tied to stakes with light leathern thongs, which are made to stretch, and having their victuals placed at a proper distance out of their reach; so that, by constantly pulling and labouring, in order to come at their food, they acquire both the strength of limbs, and the habit of drawing, that are necessary for their future destination.

The coast and bays of this country are frequented by almost every kind of Northern sea-fowl; and amongst the

1779.
October.

rest are the sea-eagles, but not, as at Oonalashka, in great numbers. The rivers inland (if I may judge from what I saw in our journey to Bolcheretfk), are stored with numerous flocks of wild-ducks of various species; one kind of which, in particular, has a most beautiful plumage, and is called, by the natives, *a-an-gitche*, a word intended to express its cry, which is not less singular than agreeable, consisting of three distinct notes, rising, at equal intervals above each other *.

There is another species called the mountain-duck †, which, Steller says, is peculiar to Kamtschatka. The drake is covered with plumage of extraordinary beauty. Besides these, we observed a variety of other water-fowl, which, from their size, seemed to be of the wild-goose kind.

In the woods through which we passed, were seen several eagles of a prodigious size; but of what species they were, I cannot pretend to determine. These are said to be of three different sorts; the black eagle, with a white head, tail, and legs ‡; of which the eaglets are as white as snow; the white eagle, so called, though, in fact, it is of a light grey; and the lead, or stone-coloured eagle §, which is the most common; and probably those I saw were of this sort. Of the hawk, falcon, and bustard-kind, there are great numbers.

* Mr. Steller has made the following scale of its cry:



For a further account of this bird, I must refer the Reader to Krascheninoff, Vol. ii. part 4.

† *Anas pitta*, capite pulchrè fasciato. Steller.

‡ *Falco leucocephalus*.

§ *Vultur albiulla*.

This

1779.
October.

This country likewise affords woodcocks, snipes, and two sorts of grouse, or moor-game. Swans are also said to be in great plenty; and, in their entertainments, generally to make a part of the repast, though I do not remember to have seen one on any occasion. The vast abundance of wild-fowl, with which the country is stored, was manifest from the numerous presents we received from the *Tion* of St. Peter and St. Paul; and which sometimes consisted of twenty brace.

We met with no amphibious sea-animals on the coast, except seals, with which the bay of Awatska swarmed; as they were, at this time, in pursuit of the salmon that were collecting in shoals, and ready to ascend the rivers. Some of them are said to pursue the fish into the fresh water, and to be found in most of the lakes which communicate with the sea.

The sea-otters* are exactly the same with those we met with at Nootka Sound, which have been already fully described, and where they are in great plenty. They are also said to have been formerly in equal abundance here; but, since the Russians have opened a trade for their skins to China, where they are sold at a price much beyond that of any other kind of fur, they have been hunted almost intirely out of the country. Amongst the Kurile islands they are still caught, though in no great numbers; but are of a superior quality to those of Kamtschatka, or the American coast.

We are informed, that, on Mednoi and Beering's Island, scarce a sea-otter is now to be found; though it appears

* *Mustela lutris*.

1779.
October.

from Muller *, that, in his time, they were exceedingly plentiful.

The Russian voyagers make mention of a great variety of amphibious sea-animals, which are said to frequent these coasts: the reason why we saw no other kinds might be, that this was the season of their migration.

Not having it in my power to treat these articles more fully, I conclude them with the less regret, since the ingenious Mr. Pennant, has a work, almost ready for publication, intitled, *Arctic Zoology*; in which the learned will receive full information concerning the animals of this peninsula. This Gentleman has very obligingly communicated to me his Catalogue of Arctic Animals, with references to his Work, and permission to insert it. It will be found at the end of this Chapter; and I feel myself extremely happy in laying it before the Reader, and thereby presenting him with what could have been furnished from no other quarter, one intire view of Kamtschadale zoology.

Fish may be considered as the staple article of food with which Providence hath supplied the inhabitants of this peninsula; who, in general, must never expect to draw any considerable part of their sustenance either from grain or cattle. It is true, the soil, as has been remarked, affords some good and nourishing roots, and every part of the country abounds in berries; but though these alone would be insufficient for the support of the people, yet, at the same time, they are necessary correctives of the putrescent quality of their dried fish. In short, fish may, with much greater justice, be here called the staff of life, than bread

* English Translation, p. 59.

is in other countries; since it appears, that neither the inhabitants, nor the only domestic animal they have, the dog, could exist without it.

1779.
October.

Whales are frequently seen, both in the sea of Okotsk, and on the side of the Eastern ocean, and, when caught, are turned to a variety of uses. Of the skin they make the soles of their shoes, and straps and thongs for various other purposes. The flesh they eat, and the fat is carefully stored, both for kitchen use, and for their lamps. The whiskers are found to be the best materials for sewing together the seams of their canoes; they likewise make nets of them for the larger kind of fish; and with the under jaw-bones their sledges are shod. They likewise work the bones into knives; and formerly the chains with which their dogs are tied, were made of that material, though at present iron ones are generally used. The intestines they clean, then blow and dry like bladders, and it is in these their oil and grease is stored; and of the nerves and veins, which are both strong, and slip readily, they make excellent snares; so that there is no part of the whale which here does not find its use.

From the middle of May, till our departure on the 24th of June, we caught great quantities of excellent flat fish, trout, and herrings. Upward of three hundred of the former, besides a number of sea-trout, were dragged out at one haul of the seine, the 15th of May. These flat fish are firm, and of a good flavour, studded upon the back with round prickly knobs, like turbot, and streaked with dark brown lines, running from the head toward the tail. About the end of May the first herring season begins. They approach in
great

1779.
October.

great shoals, but do not remain long on the coast. They had intirely left the bay before we sailed out of it the first time, but were beginning to revisit it again in October. It has been already mentioned, that the herrings were remarkably fine and large, and that we filled a great part of our empty casks with them. The beginning of June, large quantities of excellent cod were taken; a part of which were likewise salted. We caught too, at different times, numbers of small fish, much resembling a smelt, and once drew out a wolf-fish.

Notwithstanding this abundance of flat-fish, cod, and herring, it is on the salmon fishery alone that the Kamtschadales depend for their winter provisions. Of these, it is said, by naturalists, there are to be found, on this coast, all the different species that are known to exist, and which the natives formerly characterized by the different months in which they ascend the rivers. They say too, that though the shoals of different sorts are seen to mount the rivers at the same time, yet they never mix with each other; that they always return to the same river in which they were bred, but not till the third summer; that neither the male nor female live to regain the sea; that certain species frequent certain rivers, and are never found in others, though they empty themselves nearly at the same place.

The first shoals of salmon begin to enter the mouth of the Awatska about the middle of May; and this kind, which is called by the Kamtschadales *Tchavitsi*, is the largest and most valued. Their length is generally about three feet and a half: they are very deep in proportion, and their average weight is from thirty to forty pounds. The tail is not forked,

but straight. The back is of a dark blue, spotted with black; in other respects they are much like our common salmon. They ascend the river with extraordinary velocity, inasmuch that the water is sensibly agitated by their motion; and the Kamtschadales, who are always on the watch for them about the time they are expected, judge of their approach by this circumstance, and immediately let drop their nets before them. We were presented with one of the first that was caught, and given to understand that it was the greatest compliment that could be paid us. Krascheninickoff relates, that formerly the Kamtschadales made a point of eating the first fish they took, with great rejoicings, and a variety of superstitious ceremonies; and that after the Russians became their masters, it was for a long time a constant subject of quarrel between them, to whom the first should belong. The season for fishing, for this species, lasts from the middle of May till the end of June.

1779.
October.

The other sort is of a smaller kind, weighing only from eight to sixteen pounds; they are known by the general name of the red fish, and begin to collect in the bays, and at the mouths of the rivers, the beginning of June; from which time, till the end of September, they are caught in great quantities both upon the Eastern and Western coast, where any fresh water falls into the sea, and likewise all along the course of the rivers, to their very source. The manner in which they draw their nets within the bay of Awatska, is as follows: They tie one end of the net to a large stone at the water's edge, they then push off in a canoe about twenty yards in a right line, dropping their net as they advance, after which they turn and run out the remainder of the net in a line parallel to the shore; in this position

1779.
October.

position they wait, concealing themselves very carefully in the boat, and keeping a sharp look-out for the fish, which always direct their course close in with the shore, and whose approach is announced by a rippling in the water, till they find that the shoal has advanced beyond the boat, when they shoot the canoe to shore in a direct line, and never fail of inclosing their prey. Seldom more than two men are employed to a net, who hawl with facility, in this manner, seines larger than ours, to which we appoint a dozen. We at first met with very poor success in our own method of hawling; but after the Kamtschadales had very kindly put us in the way, we were not less successful than themselves. In the rivers, they shoot one net across, and hawl another down the stream to it.

The lakes that have a communication with the sea, which was the case of all those that I saw, abound with fish, that have very much the resemblance of small salmon, and are from four to six pounds weight. I could not understand that the inhabitants thought it worth their while to fish for them. As these lakes are not deep, they become an easy prey to the bears and dogs during the summer; and if I might judge from the quantity of bones to be seen upon the banks, they devour vast numbers of them.

The inhabitants, for the most part, dry their salmon, and salt very little of it. Each fish is cut into three pieces, the belly-piece being first taken off, and afterward a slice along each side the back-bone. The former of these are dried and smoked, and esteemed the finest part of the fish, and sold, when we were at St. Peter's and St. Paul's, at the rate of one hundred for a rouble. The latter are dried in the

air,

air, and either eaten whole as bread, or reduced to powder, of which they make paste and cakes, that are not unpleasant to the taste. The head, tail, and bones, are hung up and dried for winter provision for the dogs. -

1779.
October.

List of the Animals found in Kamtschatka, communicated by Mr. PENNANT.*

** Argali, wild sheep, Arct. Zool.					
		Vol. I. p. 12.	}	<i>Capra ammon</i> , Lin. Syst.	97.
Ibex, or wild goat	-	16.		<i>Capra ibex</i>	90.
** Rein	-	22.		<i>Cervus tarandus</i>	93.
** Wolf	-	38.		<i>Canis lupus</i>	58.
** Dog	-	40.			
** Arctic fox	-	42.		<i>Canis lagopus</i>	59.
** European fox	-	45.		<i>Canis vulpes</i>	59.
	a. black	46.			
	b. cross	ib.			
** Polar bear, in the Frozen sea only	-	55.	}	<i>Ursus arctos</i>	69.
** Bear	-	57.		<i>Ursus arctos</i>	
** Wolverine	-	66.		<i>Ursus luscus</i>	71.
** Common weasel	-	75.		<i>Mustela nivalis</i>	69.
** Stoat, or ermine	-	ibid.		<i>Mustela erminea</i>	68.
** Sable	-	79.		<i>Mustela zibellina</i>	68.
Common otter	-	86.		<i>Mustela lutra</i>	66.
** Sea otter	-	88.		<i>Mustela lutris</i>	66.
** Varying hare	-	94.		<i>Lepus timidus</i>	

* The quadrupeds and birds mentioned in this part of the voyage are marked in this list with a double asterisk.

1779. October.	Alpine hare	-	97.		
	** Earless marmot	-	113.	<i>Mus citellus</i>	- 113.
	Bobak marmot	-	115.		
	Water rat	-	130.	<i>Mus amphibius</i>	- 82.
	Common mouse	-	131.	<i>Mus musculus</i>	- 83.
	Oeconomic mouse	-	134.		
	Red mouse	-	136.		
	Ichelag mouse	-	138.		
	Fœtid shrew	-	139.	<i>Sorex araneus</i>	- 74.
**	Walrus. Icy sea	-	144.	<i>Trichechus rosmarus</i>	- 49.
**	Common seal	-	151.	<i>Phoca vitulina</i>	- 56.
	Great seal	-	159.		
	Leporine seal	-	161.		
	Harp seal	-	163.		
	Rubbon seal. Kurile isles		165.		
	Urfine seal	-	ibid.	<i>Phoca urfina</i>	- 58.
	Leonine seal	-	172.		
**	Whale-tailed manati	-	177.		

There were no domestic animals in Kamtschatka, till they were introduced by the Russians. The dogs, which seem to be of wolfish descent, are aboriginal.

Birds.

Land Birds.

I.	Sea eagle.	Vol. II. p. 194.	<i>Falco ossifragus</i>	-	124.
**	Cinereous eagle	- 214.	<i>Vultur albiulla</i>	-	123.
**	White-headed eagle	- 196.	<i>Falco leucocephalus</i>	-	ibid.
	Crying eagle	- 215.			
	Osprey	- 199.	<i>Falco baliaetus</i>	-	129.
	Peregrine falcon	- 202.			73*.

* The birds which are not described by Linnæus, are referred to the History of Birds, now publishing by Mr. Latham, Surgeon, in Dartford, Kent.

1779.
October.

	Goshawk	-	204.	<i>Falco palumbarius</i>	-	130.
II.	Eagle owl	-	228.	<i>Strix bubo</i>	-	131.
	Snowy owl	-	233.	<i>Strix nyctea</i>	-	132.
III.	Raven	-	246.	<i>Corvus corax</i>	-	155.
	Magpye	-	147.	<i>Corvus pica</i>	-	157.
	Nutcracker	-	252.	<i>Corvus caryocatactes</i>		157.
IV.	Cuckoo	-	266.	<i>Cuculus canorus</i>	-	168.
V.	Wryneck	-	267.	<i>Jynx torquilla</i>	-	172.
VI.	Nuthatch	-	281.	<i>Sitta Europea</i>	-	177.
VII.	White grouse	-	308.	<i>Tetrao lagopus</i>	-	274.
	Wood grouse	-	312.	<i>Tetrao urogallus</i>	-	273.
VIII.	Water ouzel	-	332.	<i>Sturnus cinclus</i>		
IX.	Fieldfare	-	340.	<i>Turdus pilaris</i>	-	291.
	Redwing thrush	-	341.	<i>Turdus iliacus</i>	-	292.
	Kamtschatkan	-	343.	(Latham, III. 28.)		
X.	Greenfinch	-	353.	<i>Loxia chloris</i>	-	304.
XI.	Golden bunting	-	367.	(Latham, II. 201.)		
XII.	Leffer red-headed linnet		379.	(Latham, II. 305.)		
XIII.	Dun fly-catcher	-	390.	(Latham, II. 351.)		
XIV.	Sky lark	-	394.	A. <i>Alanda arvensis</i>	-	287.
	Wood lark	-	395.	B. <i>Alanda arborea</i>	-	287.
XV.	White wagtail	-	396.	E. <i>Motacilla alba</i>	-	331.
	Yellow wagtail	-	396.	F. <i>Motacilla flava</i>	-	331.
	Tschutski wagtail	-	397.	H.		
XVI.	Yellow wren	-	413.	<i>Motacilla trochilus</i>	-	338.
	Redstart	-	416.	<i>Motacilla phoenicurus</i>		335.
	Longbilled	-	420.			
	Stapazina	-	421.	<i>Motacilla stapazina</i>	-	331.
	Awatka	-	422.			
XVII.	Marsh titmouse	-	427.	<i>Parus palustris</i>	-	341.
XVIII.	Chimney swallow	-	429.	<i>Hirundo rustica</i>	-	343.

1770. October.	Martin	-	430.	<i>Hirundo urbana</i>	-	344.
	Sand martin	-	430.	<i>Hirundo riparia</i>	-	344.
XIX.	European goatsucker		437.	<i>Caprimulgus Europæus</i>		346.

*Water Fowl.**Cloven-footed Water Fowl.*

Great tern	-	No. 448.	<i>Sterna hirundo</i>		
Kamtschatkan	-	P. 525.	A.		
Black-headed gull		No. 455.	<i>Larus ridibundus</i>	-	225.
Kittiwake gull	-	No. 456.	<i>Larus rissa</i>	-	224.
Ivory gull	-	No. 457.			
Arctic gull	-	No. 459.			
Tarrock	-	P. 533.	D. <i>Larus tridactylus</i>	-	224.
Red-legged	-	P. 533.	E.		
Fulmar petrel	-	No. 464.	<i>Procellaria glacialis</i>		213.
Stormy petrel	-	No. 464.	<i>Procellaria pelagica</i>		212.
Kurile petrel	-	P. 536.	A.		
Blue petrel*		Preface			
Goosander merganser		No. 465.	<i>Mergus merganser</i>	-	208.
Smew	-	No. 468.	<i>Mergus albellus</i>	-	209.
Whistling swan	-	No. 469.	<i>Anas Cygnus ferus</i>		194.A.
Great goose	-	P. 570.			
Chinese goose	-	P. 571.	<i>Anas cygnoides</i>	-	194.B.
Snow goose	-	No. 477.			
Brent goose	-	No. 478.	<i>Anas bernicla</i>	-	198.
Eider duck	-	No. 480.	<i>Anas mollissima</i>	-	198.
Black duck	-	No. 483.	<i>Anas spectabilis</i>	-	195.
Velvet duck	-	No. 481.	<i>Anas fusca</i>	-	196.
Shoveler	-	No. 485.	<i>Anas clypeata</i>	-	200.

* I never saw this, but it is mentioned by Mr. Ellis. I had omitted it in my zoologic part.

THE PACIFIC OCEAN.

357

Golden eye	-	No. 486.	<i>Anas clangula</i>	-	201.
Harlequin	-	No. 490.	<i>Anas bisstrionica</i>	-	204.
Mallard	-	No. 494.	<i>Anas boschas</i>	-	205.
** Western	-	No. 497.			
Pintail	-	No. 500.	<i>Anas acuta</i>	-	202.
** Longtailed	-	No. 501.	<i>Anas glacialis</i>	-	203.
Mouillon	-	P. 573.F.	<i>Anas glaucion</i>	-	201.
Shieldrake	-	P. 572.D.	<i>Anas tadorna</i>	-	195.
Tufted	-	P. 573.G.	<i>Anas fuligula</i>	-	207.
Falcated	-	P. 574.I.			
Garganey	-	P. 576.O.	<i>Anas querquedula</i>	-	263.
Teal	-	P. 577.P.	<i>Anas crecia</i>	-	204.
Corvorant	-	No. 509.	<i>Pelecanus carvo</i>	-	216.
Violet Corvorant	-	P. 584.B.			
Red-faced corvorant	-	P. 584.C.			
Crane	-	P. 453.A.	<i>Ardea grus</i>	-	334.
Curlew	-	P. 462.A.	<i>Scolopax arquata</i>	-	242.
Whimbrel	-	P. 462.B.	<i>Scolopax phæopus</i>	-	243.
Common sandpiper	-	No. 388.	<i>Tringa hypoleucos</i>	-	250.
Gambet	-	No. 394.	<i>Tringa gambetta</i>	-	248.
Golden plover	-	No. 399.	<i>Charadrius pluvialis</i>	-	254.
Pied oyster-catcher	-	No.	<i>Hamatopus ostralegus</i>	-	257.

1779.
October.

With pinnated Feet.

Plain phalarope

With webbed Feet.

Wandering albatross	No. 423.	<i>Diomedea exulans</i>	-	214.
Razor-bill auk.	No. 425.	<i>Alca torda</i>	-	210.
Puffin	No. 427.	<i>Alca arctica</i>	-	211.
Antient	No. 430.			
Pygmy	No. 431.			

Tufted

1779.
October.

Tufted	-	-	No. 432.	
Parroquet	-		No. 433.	
Crested	-	-	No. 434.	
Dusky	-	-	No. 435.	
Foolish guillemot	-		No. 436.	<i>Colymbus troille</i> - 220.
Black guillemot	-		No. 437.	<i>Colymbus grylle</i> - 220.
Marbled guillemot			No. 438.	
Imber diver	-		No. 440.	<i>Colymbus immer</i> - 222.
Speckled diver	-		No. 441.	
Red-throated diver			No. 443.	<i>Colymbus septentrionalis</i> 220.

C H A P. VII.

General Account of Kamtschatka continued.—Of the Inhabitants.—Origin of the Kamtschadales.—Discovered by the Russians.—Abstract of their History.—Numbers.—Present State.—Of the Russian Commerce in Kamtschatka. — Of the Kamtschadale Habitations and Dress.—Of the Kurile Islands.—The Koreki.—The Tschutski.

THE present inhabitants of Kamtschatka are of three forts. The natives, or Kamtschadales. The Russians and Cossacks: and a mixture of these two by marriage.

1779.
October.

Mr. Steller, who resided some time in this country, and seems to have taken great pains to gain information on this subject, is persuaded, that the true Kamtschadales are a people of great antiquity, and have for many ages inhabited this peninsula; and that they are originally descended from the Mungalians, and not either from the Tongusian Tartars, as some, or the Japanese, as others have imagined.

The principal arguments, by which he supports these opinions, are: That there exists not among them the trace of a tradition of their having migrated from any other country: that they believe themselves to have been created
and

1779.
October.

and placed in this very spot by their god Koutkou: that they are the most favoured of his creatures; the most fortunate and happy of beings; and that their country is superior to all others, affording means of gratification far beyond what are any where else to be met with: that they have a perfect knowledge of all the plants of the country, their virtues and uses, which could not be acquired in a short time: that their instruments and household utensils differ greatly from those of any other nation, and are made with an extraordinary degree of neatness and dexterity, which implies that they are both of their own invention, and have been long in arriving at so great perfection: that antecedently to the arrival of the Russians and Cossacks among them, they had not the smallest knowledge of any people, except the Koreki: that it is but of late they had an intercourse with the Kuriles, and still later (and happened by means of a vessel being shipwrecked on their coast) that they knew any thing of the Japanese; and, lastly, that the country was very populous, at the time the Russians first got footing in it.

The reasons he alleges for supposing them to be originally descended from the Mungalians are: That many words in their language have terminations similar to those of the Mungalian Chinese, such as, *ong, ing, oing, tcking, tcha, tchoing, kfi, kfung*, &c.; and moreover, that the same principle of inflexion or derivation obtains in both languages: that they are in general under-sized, as are the Mungalians: that their complexions, like theirs, is swarthy: that they have black hair, little beard, the face broad, the nose short and flat, the eyes small and sunk, the eye-brows thin, the belly pendent, the legs small; all which are peculiarities that are to

be found among the Mungalians. From the whole of which he draws this conclusion, that they fled for safety to this peninsula, from the rapid advances of the Eastern conquerors; as the Laplanders, the Samoides, &c. were compelled to retreat to the extremities of the North, by the Europeans.

1779.
October.

The Russians having extended their conquests, and established posts and colonies along that immense extent of coast of the frozen sea, from the Jenesei to the Anadir, appointed commissaries for the purpose of exploring and subjugating the countries still farther Eastward. They soon became acquainted with the wandering Koriacs inhabiting the North and North East coast of the sea of Okotsk, and without difficulty made them tributary. These being the immediate neighbours of the Kamtschadales, and likewise in the habits of bartering with them, a knowledge of Kamtschatka followed of course.

The honour of the first discovery is given to Feodot Alexeieff, a merchant, who is said to have sailed from the river Kovyma, round the peninsula of the Tschutski, in company with seven other vessels, about the year 1648. The tradition goes, that being separated from the rest by a storm, near the Tschukotskoi Nofs, he was driven upon the coast of Kamtschatka, where he wintered; and the summer following coasted round the promontory of Lopatka, into the sea of Okotsk, and entered the mouth of the Tigil; but that he and his companions were cut off by the Koriacs, in endeavouring to pass from thence by land to the Anadirsk. This, in part, is corroborated by the accounts of Simeon Deshneff, who commanded one of the seven vessels,

1779.
October.

and was thrown on shore at the mouth of the Anadir. Be this as it may, since these discoverers, if such they were, did not live to make any report of what they had done, Volodimir Atlassoff, a Cossack, stands for the first acknowledged discoverer of Kamtschatka *.

This person was sent, in the year 1697, from the fort Jakutsk to the Anadirsk, in the quality of commissary, with instructions to call in the assistance of the Koriacs, with a view to the discovery of countries beyond theirs, and to the subjecting them to a tribute. In 1699, he penetrated, with about sixty Russian soldiers, and the same number of Cossacks, into the heart of the peninsula, gained the Tigil, and from thence levying a tribute in furs, in his progress crossed over to the River Kamtschatka, on which he built the higher Kamtschatka *ostrog*, called Verchnei, where he left a garrison of sixteen Cossacks, and returned to Jakutsk in 1700, with an immense quantity of rare and valuable tributary furs. These he had the good sense and policy to accompany to Moscow, and, in recompence for his services, was appointed Commander of the fort of Jakutsk, with farther orders to repair again to Kamtschatka, having first drawn from the garrison at Tobolsk a reinforcement of a hundred Cossacks, with ammunition, and whatever else could give efficacy to the completion and settlement of his late discoveries. Advancing with this force toward the Anadirsk, he fell in with a bark on the River † Tunguska, laden with

* It is proper to remark, that Atlassoff sent an advanced party, under the command of a subaltern, called Lucas Moloskoff, who certainly penetrated into Kamtschatka, and returned with an account of his success, before Atlassoff set out, and is therefore not unjustly mentioned as the Discoverer of Kamtschatka.

† This River empties itself into the Jenisei.

1779.
October.

Chinese merchandize, which he pillaged; and in consequence of a remonstrance from the sufferers to the Russian court, he was seized upon at Jakutsk, and thrown into prison.

In the mean time, Potop Serioukoff, who had been left by Atlassoff, kept peaceable possession of the garrison of Verchnei; and though he had not a sufficient force to compel the payment of a tribute from the natives, yet by his management, and conciliating disposition, he continued to carry on an advantageous traffic with them as a merchant. On his return to the Anadirsk, with the general good-will of the natives of Kamtschatka, himself and party were attacked by the Koriacs, and unfortunately all cut off. This happened about 1703; and several other successive commissaries were sent into Kamtschatka, with various success, during the disgrace and trial of Atlassoff.

In 1706, Atlassoff was reinstated in his command, and appointed to conduct a second expedition into Kamtschatka, with instructions to gain upon the natives by all peaceable means, but on no pretence to have recourse to force and compulsion: but, instead of attending to his orders, he not only, by repeated acts of cruelty and injustice, made the natives exceedingly hostile and averse to their new governors, but likewise so far alienated the affections of his own people, that it ended in a mutiny of the Cossacks, and their demand of another commander. The Cossacks having carried their point, in displacing Atlassoff, seized upon his effects; and, after once tasting the sweets of plunder, and of living without discipline or controul, in vain did his successors attempt to reduce them to military discipline and subjection. Three successive commanders were assassinated

1779.
October.

in their turn; and the Cossacks, being thus in open rebellion to the Russian government, and with arms in their hands, were let loose upon the natives. The history of this country from that period, till the grand revolt of the Kamtschadales in 1731, presents one unvaried detail of massacres, revolts, and savage and sanguinary rencounters between small parties, from one end of the peninsula to the other.

What led to this revolt, was the discovery of a passage from Okotsk to the Bolchoireka, which was first made by Cosino Sokoloff, in the year 1715. Hitherto the Russians had no entrance into the country, but on the side of Anadirsk; so that the natives had frequent opportunities of both plundering the tribute, as it was carried by so long a journey out of the peninsula, and harassing the troops in their march into it. But by the discovery of this communication, there existed a safe and speedy means, as well of exporting the tribute, as of importing troops and military stores into the very heart of the country; which the natives easily saw gave the Russians so great an advantage, as must soon confirm their dominion, and therefore determined them to make one grand and immediate struggle for their liberty. The moment resolved upon, for carrying their designs into execution, was when Beering should have set sail, who was at this time on the coast with a small squadron, and had dispatched all the troops that could well be spared from the country, to join Powloutski, in an expedition against the Tschutski. The opportunity was well chosen; and it is altogether surprizing, that this conspiracy, which was so general, that every native in the peninsula is said to have had his share in it, was at the same time conducted with

with such secrecy, that the Russians had not the smallest suspicion that any thing hostile to their interests was in agitation. Their other measures were equally well taken. They had a strong body in readiness to cut off all communication with the fort Anadirsk; and the Eastern coast was likewise lined with detached parties, with a view of seizing on any Russians that might by accident arrive from Okotsk. Things were in this state, when the commissary Cheekhaerdin marched from Verchnei with his tribute, escorted by the troops of the fort, for the mouth of the Kamtschatka River, where a vessel was lying to convey them to the Anadir. Besides waiting for the departure of Beering, the revolt was to be suspended till this vessel should be out at sea, notice of which was to be given to the different Chiefs. Accordingly, the moment she was out of sight, they began to massacre every Russian and Cossack that came in their way, and to set fire to their houses. A large body ascended the River Kamtschatka, made themselves masters of the fort and *of* the commissary had just quitted, put to death all that were in it, and, except the church and the fort, reduced the whole to ashes. Here it was that they first learned that the Russian vessel, in which the commissary had embarked, was still on the coast, which determined them to defend themselves in the fort. The wind fortunately soon brought the vessel back to the harbour; for had she proceeded in her voyage, nothing probably could have prevented the utter extirpation of the Russians. The Cossacks finding, on their landing, that their houses had been burnt to the ground, and their wives and children either massacred or carried off prisoners, were enraged to madness. They marched directly to the fort, which they attacked with great fury, and the natives as resolutely defended, till at

†

length

1779.
October.

1779.
October.

length the powder-magazine taking fire, the fort was blown up, together with most of those that were in it. Various rencounters succeeded to this event, in which much blood was spilled on both sides: At length, two of the principal leaders being slain, and the third (after dispatching his wife and children, to prevent their falling into the enemy's hand) having put an end to himself, peace was established.

From that period every thing went on very peaceably, till the year 1740, when a few Russians lost their lives in a tumult, which was attended with no farther consequences; and, except the insurrection at Bolcheretsk in 1770 (which hath been already noticed), there has been no disturbance since.

Though the quelling the rebellion of 1731 was attended with the loss of a great number of inhabitants, yet I was informed, that the country had recovered itself, and was become more populous than ever, when, in the year 1767, the small-pox, brought by a soldier from Okotsk, broke out among them for the first time, marking its progress with ravages not less dreadful than the plague, and seeming to threaten their entire extirpation. They compute, that near twenty thousand died of this disorder in Kamtschatka, the Koreki country, and the Kurile Islands. The inhabitants of whole villages were swept away. Of this we had sufficient proofs before our eyes. There are no less than eight *ostrogs* scattered about the bay of Awatska, all which, we were informed, had been fully inhabited, but are now entirely desolate, except St. Peter and St. Paul; and even that contains no more than seven Kamtschadales, who are tributary. At Paratounca *ostrug* there are but thirty-six native inhabitants,

men, women, and children, which, before it was visited by the small-pox, we were told, contained three hundred and sixty. In our road to Bolcheretsk, we passed four extensive *ostrogs*, with not an inhabitant in them. In the present diminished state of the natives, with fresh supplies of Russians and Cossacks perpetually pouring in, and who intermix with them by marriage, it is probable, that in less than half a century there will be very few of them left. By Major Behm's account, there are not now more than three thousand who pay tribute, the Kurile islanders included.

1779.
October.

I understood that there are at this time, of the military, in the five forts of Nichnei, Verchnei, Tigil, Bolcheretsk, and St. Peter and St. Paul, about four hundred Russians and Cossacks, and near the same number at Ingiga, which, though to the North of the peninsula is, I learned, at present under the Commander of Kamtschatka; to these may be added the Russian traders and emigrants, whose numbers are not very considerable.

The Russian government, established over this country, is mild and equitable, considered as a military one, in a very high degree. The natives are permitted to choose their own magistrates from among themselves, in the way, and with the same powers they had ever been used. One of these, under the title of *Toion*, presides over each *ostrog*; is the referee in all differences; imposes fines, and inflicts punishments for all crimes and misdemeanors; referring to the governor of Kamtschatka such only as he does not choose, from their intricacy or heinousness, to decide upon himself. The *Toion* has likewise the appointment of a civil officer, called a Corporal, who assists him in the execution of his office, and in his absence acts as his deputy.

By

1779.
October.

By an edict of the present Empress, no crime whatsoever can be punished with death. But we were informed, that in cases of murder (of which there are very few), the punishment of the *knout* is administered with such severity, that the offender, for the most part, dies under it.

The only tribute exacted (which can be considered as little more than an acknowledgment of the Russian dominion over them) consists, in some districts, of a fox's skin, in others of a sable's, and in the Kurile isles of a sea otter's; but as this is much the most valuable, one skin serves to pay the tribute of several persons. The *Toions* collect the tribute in their respective districts. Besides the mildness of their government, the Russians have a claim to every praise for the pains they have bestowed, and which have been attended with great success, in converting them to Christianity, there remaining, at present, very few idolaters among them. If we may judge of the other missionaries, from the hospitable and benevolent pastor of Paratounca (who is a native on the mother's side), more suitable persons could not be set over this business. It is needless to add, that the religion taught is that of the Greek church. Schools are likewise established in many of the *ostrogs*, where the children of both the natives and Cossacks are gratuitously instructed in the Russian language.

The commerce of this country, as far as concerns the exports, is intirely confined to furs, and carried on principally by a company of merchants, instituted by the present Empress. This company originally consisted of twelve, and three have been lately added to it. They are indulged with certain privileges, and distinguished by wearing a golden medal,

1770.
October.

medal, as a mark of the Empress's encouragement and protection of the fur trade. Besides these, there are many inferior traders (particularly of the *Cossacks*) scattered through the country. The principal merchants, for the time they are here, reside at *Bolcheretsk*, or the *Nishnei ostrog*, in which two places the trade almost wholly centers. Formerly this commerce was altogether carried on in the way of barter, but of late years every article is bought and sold for ready money only; and we were surprized at the quantity of specie in circulation in so poor a country. The furs sell at a high price, and the situation and habits of life of the natives call for few articles in return. Our sailors brought a great number of furs with them from the coast of America, and were not less astonished than delighted with the quantity of silver the merchants paid down for them; but on finding neither gin shops to resort to, nor tobacco, or any thing else that they cared for, to be had for money, the roubles soon became troublesome companions, and I often observed them kicking them about the deck. The merchant I have already had occasion to mention, gave our men at first thirty roubles for a sea-otter's skin, and for others in proportion; but finding that they had considerable quantities to dispose of, and that he had men to deal with who did not know how to keep up the market, he afterward bought them for much less.

The articles of importation are principally European, but not confined to Russian manufactures; many are English and Dutch; several likewise come from Siberia, Bucharra, the Calmucks, and China. They consist of coarse woollen and linen clothes, yarn stockings, bonnets, and gloves; thin Persian silks; cottons, and pieces of nankeen, silk and cotton handkerchiefs; brass coppers and pans, iron stoves,

1779.
October.

files, guns, powder and shot; hardware, such as hatchets, bills, knives, scissars, needles, looking-glasses; flour, sugar; tanned hides, boots, &c. We had an opportunity of seeing a great many of these articles in the hands of a merchant, who came in the Empress's galliot from Okotsk; and I shall only observe generally, that they sold for treble the price they might have been purchased for in England. And though the merchants have so large a profit upon these imported goods, they have a still larger upon the furs at Kiachta, upon the frontiers of China, which is the great market for them. The best sea-otter skins sell generally in Kamtschatka, for about thirty roubles apiece. The Chinese merchant at Kiachta purchases them at more than double that price, and sells them again at Peking at a great advance, where a farther profitable trade is made with some of them to Japan. If, therefore, a skin is worth thirty roubles in Kamtschatka, to be transported first to Okotsk, thence to be conveyed by land to Kiachta, a distance of one thousand three hundred and sixty-four miles, thence on to Peking, seven hundred and sixty miles more, and after this to be transported to Japan, what a prodigiously advantageous trade might be carried on between this place and Japan, which is but about a fortnight's, at most, three weeks sail from it?

All furs exported from hence across the sea of Okotsk, pay a duty of ten *per cent.* and fables a duty of twelve. And all sorts of merchandize, of whatever denomination, imported from Okotsk, pay half a rouble for every pood*.

* Thirty-six pounds English.

The duties arising from the exports and imports, of which I could not learn the amount, are paid at Okotsk: but the tribute is collected at Bolcheretsk; and, I was informed by Major Behm, amounted in value to ten thousand roubles annually.

1779.
October.

There are six vessels (of forty to fifty tons burthen) employed by the Empress between Okotsk and Bolcheretsk; five of which are appropriated to the transporting of stores and provisions from Okotsk to Bolcheretsk; except that once in two or three years, some of them go round to Awatska, and the Kamtschatka River; the sixth is only used as a packet boat, and always kept in readiness, and properly equipped for conveying dispatches. Besides these, there are about fourteen vessels employed by the merchants in the fur trade, amongst the islands to the Eastward. One of these we found frozen up in the harbour of St. Peter and St. Paul, which was to sail on a trading voyage to Oonalashka, as soon as the season would permit.

It is here to be observed, that the most considerable and valuable part of the fur-trade is carried on with the islands that lie between Kamtschatka and America. These were first discovered by Beering, in 1741, and being found to abound with sea-otters, the Russian merchants became exceedingly eager in searching for the other islands seen by that navigator, to the South East of Kamtschatka, called, in Muller's Map, the Islands of Seduction, St. Abraham, &c. In these expeditions they fell in with three groups of islands. The first about fifteen degrees to the East of Kamtschatka, in 53° North latitude; the second about twelve degrees to the Eastward of the former; and the third, Oonalashka, and the islands in its neighbourhood. These trad-

1779.
October.

ing adventurers advanced also as far East as Shumagin's Islands (so called by Beering), the largest of which is named Kodiak. But here, as well as on the continent at Alaska, they met with so warm a reception in their attempts to compel the payment of a tribute, that they never afterward ventured so far. However they conquered and made tributary the three groups before mentioned.

In the Russian charts, the whole sea between Kamtschatka and America is covered with islands; for the adventurers in these expeditions frequently falling in with land, which they imagined did not agree with the situation of other laid down by preceding voyagers, immediately concluded it must be a new discovery, and reported it as such on their return; and since the vessels employed in these expeditions were usually out three or four years, and oftentimes longer, these mistakes were not in the way of being soon rectified. It is however now pretty certain, that the islands already enumerated are all that have yet been discovered, by the Russians, in that sea, to the Southward of 60° of latitude.

It is from these islands that the sea-otter skins, the most valuable article of the fur trade, are for the most part drawn; and as they are brought completely under the Russian dominion, the merchants have settlements upon them, where their factors reside, for the purpose of bartering with the natives. It was with a view to the farther increase and extension of this trade, that the Admiralty of Okotsk fitted out an expedition for the purpose of making discoveries to the North and North East of the islands above-mentioned, and gave the command of it, as I have already observed, to Lieutenant Synd. This gentleman, having directed his course

course too far to the Northward, failed in the object of his voyage; for, as we never saw the sea-otter to the Northward of Bristol Bay, it seems probable, that they shun those latitudes where the larger kind of amphibious sea-animals abound. This was the last expedition undertaken by the Russians for prosecuting discoveries to the Eastward; but they will undoubtedly make a proper use of the advantages we have opened to them, by the discovery of Cook's river.

1779.
October.

Notwithstanding the general intercourse that, for the last forty years, hath taken place between the natives, the Russians, and Cossacks, the former are not more distinguished from the latter by their features and general figure, than by their habits and cast of mind. Of the persons of the natives, a description hath been already given, and I shall only add, that their stature is much below the common size. This Major Behm attributes, in a great measure, to their marrying so early; both sexes generally entering into the conjugal state at the age of thirteen or fourteen. Their industry is abundantly conspicuous, without being contrasted with the laziness of their Russian and Cossack inmates, who are fond of intermarrying with them, and, as it should seem, for no other reason, but that they may be supported in sloth and inactivity. To this want of bodily exertion may be attributed those dreadful scorbutic complaints, which none of them escape; whilst the natives, by constant exercise and toil in the open air, are intirely free from them.

Referring the reader for an account of the manners, customs, and superstitions of the Kamtschadales, at the time the Russians became first acquainted with this country, to

1779.
October.

Krafcheninicoff, I shall proceed to a description of their habitations and drefs.

The houses (if they may be allowed that name) are of three distinct sorts, *jourts*, *balagans*, and *loghouses*, called here *isbas*. The first are their winter, the second their summer habitations; the third are altogether of Russian introduction, and inhabited only by the better and wealthier sort.

The *jourts*, or winter habitations, are constructed in the following manner: An oblong square, of dimensions proportioned to the number of persons for whom it is intended (for it is proper to observe, that several families live together in the same *jourt*) is dug in the earth to the depth of about six feet. Within this space, strong posts, or wooden pillars, are fastened in the ground, at proper distances from each other, on which are extended the beams for the support of the roof, which is formed by joists, resting on the ground with one end, and on the beams with the other. The interstices between the joists are filled up with a strong wicker-work, and the whole covered with turf; so that a *jourt* has externally the appearance of a round squat hillock. A hole is left in the center, which serves for chimney, window, and entrance, and the inhabitants pass in and out by means of a strong pole (instead of a ladder) notched just deep enough to afford a little holding to the toe. There is likewise another entrance in the side, even with the ground, for the convenience of the women; but if a man makes use of it, he subjects himself to the same disgrace and derision, as a sailor would, who descends through lubbers-hole. The *jourt* consists of one apartment, of the form of an oblong square. Along the sides are extended broad platforms

1779.
October.

forms made of boards, and raised about six inches from the ground, which they use as seats, and on which they go to rest, after strewing them with mats and skins. On one side is the fire-place, and the side opposite is entirely set apart for the stowage of provisions and kitchen utensils. At their feasts, and ceremonious entertainments, the hotter the *jours* are made for the reception of the guests, the greater the compliment. We found them at all times so hot, as to make any length of stay in them to us intolerable. They betake themselves to the *jours* the middle of October; and, for the most part, continue in them till the middle of May.

The *balagans* are raised upon nine posts, fixed into the earth in three rows, at equal distances from one another, and about thirteen feet high from the surface. At the height of between nine and ten feet, rafters are passed from post to post, and firmly secured by strong ropes. On these rafters are laid the joists, and the whole being covered with turf, constitutes the platform or floor of the *balagan*. On this is raised a roof of a conical figure, by means of tall poles, fastened down to the rafters at one end, and meeting together in a point at the top, and thatched over with strong coarse grass. The *balagans* have two doors placed opposite each other, and they ascend to them by the same sort of ladders they use in the *jours*. The lower part is left entirely open; and within it they dry their fish, roots, vegetables, and other articles of winter consumption. The proportion of *jours* to *balagans*, is as one to six; so that six families generally live together in one *jour*.

The loghouses (*isbas*) are raised with long timbers piled horizontally, the ends being let into one another, and the
seams

1779.
October.

seams caulked with moss. The roof is sloping like that of our common cottage-houses, and thatched with coarse grass or rushes. The inside consists of three apartments. At one end is what may be called the entry, which runs the whole width and height of the house, and is the receptacle of their sledges, harness, and other more bulky gears and household stuff. This communicates with the middle and best apartment, furnished with broad benches, for the purpose, as hath been above mentioned, of both eating and sleeping upon. Out of this is a door into the kitchen, one half of which is taken up by the oven or fire-place, so contrived, by being let into the wall that separates the kitchen and the middle apartment, as to warm both at the same time. Over the middle apartment and kitchen are two lofts, to which they ascend by a ladder placed in the entry. There are two small windows in each apartment, made of *talc*, and in the houses of the poorer sort, of fish skin. The beams and boards of the cieling are dubbed smooth with a hatchet (for they are unacquainted with the plane), and from the effects of the smoke are as black and shining as jet.

A town of Kamtschatka is called an *ostrog*, and consists of several of the three sorts of houses above described; but of which *balagans* are much the most numerous; and I must observe, that I never met with a house of any kind detached from an *ostrog*. Saint Peter and Saint Paul consists of seven loghouses, or *isbas*, nineteen *balagans*, and three *jourts*. Paratounca is of about the same size. Karatchin and Natchekin contain fewer loghouses, but full as many *jourts* and *balagans* as the former; from whence I conclude, that such is the usual size of the *ostrogs*.

Having

1779.
October.

Having already had occasion to mention the dress of the Kamtschadale women, I shall here confine myself to a description of that of the men.

The outermost garment is of the shape of a carter's frock. Those worn in summer are of nankeen; in winter they are made of skins, most commonly of the deer or dog, tanned on one side, the hair being left on the other, which is worn innermost. Under this is a close jacket of nankeen, or other cotton stuffs, and beneath that a shirt of thin Persian silk, of a blue, red, or yellow colour. The remaining part of their dress consists of a pair of tight trowsers, or long breeches, of leather, reaching down to the calf of the leg; of a pair of dog or deer skin boots, with the hair innermost; and of a fur cap, with two flaps, which are generally tied up close to the head, but in bad weather are let to fall round the shoulders.

The fur dress presented to me by a son of Major Behm (as already mentioned) is one of those worn by the *Toions*, on ceremonious occasions. The form exactly resembles that of the common exterior garment just described. It is made of small triangular pieces of fur, chequered brown and white, and joined so neatly as to appear to be one skin. A border of six inches breadth, wrought with threads of different coloured leather, and producing a rich effect, furrounds the bottom, to which is suspended a broad edging of the sea-otter skin. The sleeves are turned up with the same materials; and there is likewise an edging of it round the neck, and down the opening at the breast. The lining is of a smooth white skin. A cap, a pair of gloves, and boots, wrought with the utmost degree of neatness, and made of the same materials, constitute the remainder of

1779-
October.

this suit. The Russians in Kamtschatka wear the European dress; and the uniform of the troops quartered here, is of a dark green, faced with red.

As the people situated to the North and South of this country are yet imperfectly known, I shall conclude the account of Kamtschatka with such information concerning the Kurile Islands, and the Koreki and Tschutski, as I have been able to acquire.

The chain of islands, running in a South West direction from the Southern promontory of Kamtschatka to Japan, extending from latitude 51° to 45° , are called the Kuriles. They obtained this name from the inhabitants of the neighbourhood of Lopatka, who being themselves called Kuriles, gave their own name to these islands, on first becoming acquainted with them. They are, according to Spanberg, twenty-two in number, without reckoning the very small ones. The Northernmost, called Shoomska, is not more than three leagues from the promontory Lopatka, and its inhabitants are a mixture of natives and Kamtschadales. The next to the South, called Paramoufir, is much larger than Shoomska, and inhabited by the true natives; their ancestors, according to a tradition among them, having come from an island a little farther to the South, called Onecutan. Those two islands were first visited by the Russians in 1713, and at the same time brought under their dominion. The others in order, are at present made tributary down to Ooshesheer inclusive, as I am informed by the worthy Pastor of Paratounca, who is their Missionary, and visits them once in three years, and speaks of the islanders in terms of the highest commendation, representing them as a friendly, hospitable, generous, humane race of people,

1779.
October.

and excelling their Kamtschadale neighbours, not less in the formation of their bodies, than in docility and quickness of understanding. Though Oosheesheer is the Southernmost island that the Russians have yet brought under their dominion, yet I understand that they trade to Oorooop, which is the eighteenth; and, according to their accounts, the only one where there is a good harbour for ships of burthen. Beyond this, to the South, lies Nadeegsda, which was represented to us by the Russians, as inhabited by a race of men remarkably hairy, and who, like those of Oorooop, live in a state of entire independence*.

In the same direction, but inclining somewhat more to the Westward, lie a group of islands, which the Japanese call Jeso; a name which they also give to the whole chain of islands between Kamtschatka and Japan. The Southernmost, called Matmai, hath been long subject to the Japanese, and is fortified and garrisoned on the side toward the continent. The two islands to the North East of Matmai, Kunachir, and Zellany, and likewise the three still farther to the North East, called the Three Sisters, are perfectly independent.

* Spanberg places the island here spoken of in $43^{\circ} 50'$ North latitude, and mentions his having watered upon it; and that this watering party brought off eight of the natives; of whom he relates the following circumstances: That their bodies were covered all over with hair; that they wore a loose striped silk gown, reaching as low as their ankles; and that some of them had silver rings pendant from the ears: that, on spying a live cock on deck, they fell on their knees before it; and likewise, before the presents that were brought out to them, closing and stretching forth their hands, and bowing their heads, at the same time, down to the ground; that, except the peculiarity of their hairiness, they resembled the other Kurile islanders in their features and figure, and spoke the same language. The journal of the ship *Castricom* also mentions this circumstance of the inhabitants of the country discovered by them, and called Jeso, being hairy all over the body.

1779.
October.

A trade of barter is carried on between Matmai and the islands last mentioned; and between those again and the Kuriles, to the Northward; in which, for furs, dried fish, and oil, the latter get silk, cotton, iron, and Japanese articles of furniture*.

The inhabitants of as many of the islands as are brought under the Russian dominion, are, at present, converted to Christianity. And probably the time is not very distant, when a friendly and profitable intercourse will be brought about between Kamtschatka and the whole of this chain of islands; and which will draw after it a communication with Japan itself. This may eventually be greatly facilitated by a circumstance related to me by Major Behm, that several Russians, who had been taught the Japanese language, by two men belonging to a vessel of that nation, which had been † shipwrecked on the coast of Kamtschatka, had been sent among those islands.

The

* This accounts for what Kracheninicoff says, that he got from Paramoufir a japanned table and vase, a scymeter, and a silver ring, which he sent to the cabinet of her Imperial Majesty at Petersburg. And if what Mr. Steller mentions, on the authority of a Kurile, who was interpreter to Spanberg in his voyage to Japan, is to be credited, that nearly the same language is spoken at Kunashir and Paramoufir, it cannot be questioned, that some intercourse has always subsisted between the inhabitants of this extensive chain of islands.

† The vessel here spoken of was from Satsma, a port in Japan, bound for another Japanese port, called Azaka, and laden with rice, cotton, and silks. She sailed with a favourable wind; but, before she reached her destination, was driven out to sea by a violent storm, which carried away her masts and rudder.

On the storm's abating, not one of the crew, which consisted of seventeen (having probably never made other than coasting voyages), knew who they were, or what course to steer. After remaining in this situation six months, they were driven on shore near the promontory Lopatka; and having cast out an anchor, began to carry on shore such articles as were necessary to their existence. They next erected a tent, and had remained in it twenty-three days, without seeing a human being; when chance conducted

The advantages that would accrue to the Russians by an immediate trade to Japan, have been already adverted to, and are too many, and too obvious, to need insisting upon.

1779.
October.

The Koreki country includes two distinct nations, called the Wandering and Fixed Koriacs.

The former inhabit the Northern part of the isthmus of Kamtschatka, and the whole coast of the Eastern Ocean, from thence to the Anadir.

The country of the Wandering Koriacs stretches along the North East of the sea of Okotsk to the river Penskina, and Westward toward the river Kovyma.

conducted a Cossack officer, called Andrew Chinnikoff, with a few Kamtschadales to their habitation. The poor unfortunate Japanese, overwhelmed with joy at the sight of fellow-creatures, made the most significant tenders, they were able, of friendship and affection; and presented their visitors with silks, sabres, and a part of whatever else they had brought from the ship. The treacherous Chinnicoff made reciprocal returns of kindness and good-will; and, after remaining with them long enough to make such observations as suited his designs, withdrew from them in the night. The Japanese finding that their visitors did not return, knew not what course to take. In despair they manned their boat, and were rowing along the coast in search of a habitation, when they came up with their vessel, which had been driven ashore; and found Chinnicoff and his companions pillaging her, and pulling her in pieces for the sake of the iron. This sight determined them to continue their course, which Chinnicoff perceiving, ordered his men to pursue and massacre them. The unfortunate Japanese, seeing a canoe in pursuit, and which they could not escape, apprehended what was to follow. Some of them leaped into the sea; others, in vain, had recourse to prayer and intreaties. They were all massacred but two, by the very sabres they had presented to their supposed friends a few days before. One of the two was a boy about eleven years old, named Gowga, who had accompanied his father, the ship's pilot, to learn navigation; the other was a middle-aged man, the supercargo, and called Sofa.

Chinnicoff soon met with the punishment due to his crimes. The two strangers were conducted to Petersburg, where they were sent to the academy, with proper instructors and attendants; and several young men were, at the same time, put about them for the purpose of learning the Japanese language.

They were thrown on the coast of Kamtschatka in 1730. The younger survived the absence from his country five, the other six years. Their portraits are to be seen in the cabinet of the empress at Petersburg.

Vid. Krascheninicoff, Vol. ii. part 4. Fr. Ed.

The

1779.
October.

The Fixed Koriacs have a strong resemblance to the Kamtschadales; and, like them, depend altogether on fishing for subsistence. Their dress and habitations are of the same kind. They are tributary to the Russians, and under the district of the Ingiga.

The Wandering Koriacs occupy themselves intirely in breeding and pasturing deer, of which they are said to possess immense numbers; and that it is no unusual thing for an individual Chief to have a herd of four or five thousand. They despise fish, and live intirely on deer. They have no *balagans*; and their only habitations are like the Kamtschadale *jourts*, with this difference, that they are covered with raw deer-skins in winter, and tanned ones in summer. Their sledges are drawn by deer, and never by dogs; which, like the latter, are likewise always spaved, in order to be trained to this business. The draft deer pasture in company with the others; and when they are wanted, the herdsmen make use of a certain cry, which they instantly obey, by coming out of the herd.

The priest of Paratounca informed me, that the two nations of the Koriacs, and the Tschutski speak different dialects of the same language; and that it bears not the smallest resemblance to the Kamtschadale.

The country of the Tschutski is bounded on the South by the Anadir, and extends along the coast to the Tschutskoi Nofs. Like the Wandering Koriacs, their attention is principally confined to their deer, of which their country affords great numbers, both tame and wild. They are a stout, well-made, bold, warlike race of people; redoubtable neighbours to both nations of the Koriacs, who often feel the effects of their predatory incursions. The Russians have,

have, for many years, been using their endeavours to bring them under their dominion ; and, after losing a great many men in their different expeditions for this purpose, have not been able to effect it.

1779.
October.

I shall here conclude this article, since all we can say of this people, on our own knowledge, hath been laid before the Reader in the preceding Volume.

C H A P. VIII.

Plan of our future Proceedings.—Course to the Southward, along the Coast of Kamtschatka.—Cape Lopatka.—Pass the Islands Shoomska and Paramousir.—Driven to the Eastward of the Kuriles.—Singular Situation with respect to the pretended Discoveries of former Navigators.—Fruitless Attempts to reach the Islands North of Japan.—Geographical Conclusions.—View of the Coast of Japan.—Run along the East Side.—Pass two Japanese Vessels.—Driven off the Coast by contrary Winds.—Extraordinary Effect of Currents.—Steer for the Bashees.—Pass large Quantities of Pumice Stone.—Discover Sulphur Island.—Pass the Pratas.—Isles of Lema, and Ladron Island.—Chinese Pilot taken on board the Resolution.—Journals of the Officers and Men secured.

1779.
October.
Saturday 9.

OUR instructions from the Board of Admiralty having left a discretionary power with the commanding Officer of the expedition, in case of failure in the search of a passage from the Pacific into the Atlantic Ocean, to return to England, by whatever route he should think best for the farther improvement of geography; Captain Gore demanded of the principal officers their sentiments, in writing, respecting the manner in which these orders might

most

most effectually be obeyed. The result of our opinions, which he had the satisfaction to find unanimous, and entirely coinciding with his own, that the condition of the ships, of the sails and cordage, made it unsafe to attempt, at so advanced a season of the year, to navigate the sea between Japan and Asia; which would otherwise have afforded the largest field for discovery; that it was therefore advisable to keep to the Eastward of that island, and in our way thither to run along the Kuriles, and examine more particularly the islands that lie nearest the Northern coast of Japan, which are represented as of a considerable size, and independent of the Russian and Japanese governments. Should we be so fortunate as to find in these any safe and commodious harbours, we conceived they might be of importance, either as places of shelter for any future navigators, who may be employed in exploring the seas, or as the means of opening a commercial intercourse among the neighbouring dominions of the two empires. Our next object was to survey the coast of the Japanese Islands, and afterward to make the coast of China, as far to the Northward as we were able, and run along it to Macao.

1779.
October.

This plan being adopted, I received orders from Captain Gore, in case of separation, to proceed immediately to Macao; and at six o'clock in the evening of the 9th of October, having cleared the entrance of Awatska Bay, we steered to the South East, with the wind North West and by West. At midnight we had a dead calm, which continued till noon of the 10th; the light-house, at this time, bearing North half West, distant five leagues, and Cape Gavareea South by West half West. Being luckily in soundings of sixty and seventy fathoms water, we employed our time very profitably in catching cod, which were exceedingly

Saturday 9.

Sunday 10.

1779.
October.

Monday 11.

fine and plentiful; and at three in the afternoon, a breeze sprang up from the West, with which we stood along the coast to the Southward. A head-land, bearing South by West, now opened with Cape Gavareea, lying about seven leagues beyond it. Between them are two narrow but deep inlets, which may probably unite behind what appears to be an high island. The coast of these inlets is steep and cliffy. The hills break abruptly, and form chasms and deep vallies, which are well wooded. Between Cape Gavareea (which lies in latitude $52^{\circ} 21'$, longitude $158^{\circ} 38'$) and Awatska Bay, there are appearances of several inlets, which at first sight may flatter the mariner with hopes of finding shelter and safe anchorage: but the Russian pilots assured us, that there are none capable of admitting vessels of the smallest size, as the low land fills up the spaces that appear vacant between the high projecting head-lands. Toward evening, it again became calm; but, at midnight, we had a light breeze from the North, which increased gradually to a strong gale; and at noon, the next day, we found ourselves in latitude $52^{\circ} 4'$, longitude $158^{\circ} 31'$, when Cape Gavareea bore North by West one quarter West; the South extreme South West half West. We were at this time distant from the nearest shore about three leagues, and saw the whole country inland covered with snow. A point of land to the Southward, which we place in latitude $51^{\circ} 54'$, formed the North side of a deep bay, called Achachinskoi, in the distant bottom of which we supposed a large river to empty itself, from the land behind being so unusually low. South of Achachinskoi Bay, the land is not so rugged and barren as that part of the country which we had before passed.

During the night we had variable winds and rain; but at four in the morning of the 12th, it began to blow so strong, from the North East, as to oblige us to double-reef the top-sails, and make it prudent to stand more off the shore. At six, the weather becoming more moderate and fair, we again made sail, and stood in for the land. At noon, our latitude was $51^{\circ} 0'$, longitude $157^{\circ} 25'$. The Northernmost land in sight, being the point we have mentioned as first opening with Cape Gavareea, bore North North East. A head-land, with a flat top, which is in latitude $51^{\circ} 27'$, and makes the South point of an inlet, called Girowara, bore North one quarter East, and the Southernmost land in sight West three quarters North, distant six leagues. At this time we could just perceive low land stretching from the Southern extreme; but the wind veering round to the North West, we could not get a nearer view of it. At six in the afternoon, we saw, from the mast head, Cape Lopatka, the Southernmost extremity of Kamtschatka. It is a very low flat Cape, sloping gradually from the high level land that we saw at noon, and bore West half North, about five leagues distant; and the high land North West by West half West. As this point of land forms so marked an object in the geography of the Eastern coast of Asia, we were glad to be able, by an accurate observation, and several good angles, to determine its precise situation, which is in latitude $51^{\circ} 0'$, longitude $156^{\circ} 45'$. To the North West of it we saw a remarkable high mountain, the top of which loses itself in the clouds; and, at the same time, the first of the Kurile Islands, called Shoomska, appeared in sight, bearing West half South. The passage between this island and Cape Lopatka, the Russians describe as being three miles broad, and very dangerous, on account of the rapidity of the tides,

1779.
October.
Tuesday 12.

1779.
October.

and the funk rocks that are off the Cape. From Cape Gavareca to Lopatka, the coast trends South East. South of Achachinskoi, the land is not so high and broken as between that Bay and the mouth of Awatka, being only of a moderate elevation toward the sea, with hills gradually rising farther back in the country. The coast is steep and bold, and full of white chalky patches.

At noon, the weather falling again to a calm, afforded us an opportunity of catching some fine cod. We were, at this time, in forty fathoms water, and about five or six leagues from Cape Lopatka. Both in the fore and afternoon, we had observations, with different compasses, for the variation, and found it to be $5^{\circ} 20'$ East.

Wednes. 13.

We stood on all night, under an easy sail, to the South South West, having the wind Westerly. At midnight, we founded, and had sixty fathoms; and, at day-break of the 13th, we saw the second of the Kurile Islands (called by the Russians Paramoufir), extending, from North West by West, to West half South. This land is very high, and almost intirely covered with snow. At noon, the extremes bore from North North West half West, to West North West half West; and a high peaked mountain, from which some thought they saw smoke issuing, North West by West half West, about twelve or fourteen leagues distant. At this time our latitude, by observation, was $49^{\circ} 49'$, and our longitude $157^{\circ} 0'$. In the course of the day we saw many gulls and albatrosses, and several whales.

Paramoufir is the largest of the Kuriles under the dominion of Russia, and well deserves a more accurate survey, than we were at this time allowed to take. For, in the afternoon, the gale increasing from the West, we were never
able

able to approach it nearer than we had done at noon; and were, therefore, obliged to be contented with endeavouring to ascertain its situation at that distance. We place the South end of the island in latitude $49^{\circ} 58'$; the North end in latitude $50^{\circ} 46'$, and in longitude $10'$ West of Lopatka; and as this position is found not to differ materially from that given by the Russians, it is probably very near the truth. Whilst we were abreast of this island, we had a very heavy swell from the North East, though the wind had, for some time, been from the Westward; a circumstance which we have already remarked more than once during the course of our voyage. In the night we tried for soundings, but found no ground with fifty fathoms of line.

1779.
October.

On the 14th and 15th, the wind blowing steadily and fresh from the Westward, we were obliged to stand to the Southward; and consequently hindered from seeing any more of the Kurile islands. At noon of the 16th, the latitude, by observation, was $45^{\circ} 27'$; the longitude, deduced from a number of lunar observations taken during the three days past, $155^{\circ} 30'$. The variation $4^{\circ} 30'$ East. In this situation, we were almost surrounded by the supposed discoveries of former navigators, and uncertain to which we should turn ourselves. To the Southward and the South West were placed, in the French charts, a groupe of five islands, called the Three Sisters, Zellany and Kunashir. We were about ten leagues, according to the same maps, to the Westward of the land of De Gama, which we had passed to the Eastward in April last, at a distance rather less than this, without seeing any appearance of it; from which circumstance we may now conclude, that, if such land exist at all, it must be an island of a very inconsiderable

Thursday 14.

Friday 15.

Saturday 16.

1779.
October.

size *. On the other hand, if we give credit to the original position of this land, fixed by Texiera †, it lay to the West by South; and as the Company's Land ‡, Staten Island §, and the famous land of Jeso ||, were also supposed to lie nearly

* From Muller's account of the course steered by Captain Spanberg, in his route from Kamtschatka to Japan, it appears, that he must also undoubtedly have seen De Gama's Land, if it really has the extent given it in Mr. d'Anville's maps. Walton, who commanded a vessel in the same expedition, seems also to have looked in vain for this land on his return from Japan; and three years afterward, on account of some doubts that had arisen respecting Spanberg's course, Beering went directly in search of it, as low as the latitude of 46° .

See *Voyages et Decouvertes*, &c. p. 210, & seq.

† See Book VI. Chap. i. p. 149.

‡ This land was seen by the Dutchmen who sailed in the *Castricom* and *Breskes*, and imagined by them to be part of the continent of America. There now remains scarce any doubt of its being the islands of Oorooop and Nadeegsda. See the Journals of the *Castricom* and *Breskes*, published by Wetzler.

§ This land was also discovered by the *Castricom*; and, from its situation, as described in the journal of that vessel, it appears to be the islands of the Three Sisters.

|| The country of Jeso, which has so long been a stumbling-block to our modern geographers, was first brought to the knowledge of Europeans by the Dutch vessels mentioned in the preceding notes. The name appears, from the earliest accounts, to have been well known, both to the Japanese and the Kamtschadales; and used by them, indiscriminately, for all the islands lying between Kamtschatka and Japan. It has since been applied to a large imaginary island, or continent, supposed to have been discovered by the *Castricom* and *Breskes*; and it may not, therefore, be improper to consider the grounds of this mistake, as far as can be collected from the Journals of this expedition. The object of the voyage, in which those ships were engaged, was to explore the Eastern shore of Tartary; but, being separated by a storm off the South East point of Japan, they sailed in different tracks along the East side of that island; and, having passed its Northern extremity, proceeded singly on their intended expedition.

The *Castricom*, commanded by De Vries, steering Northward, fell in with land on the third day, in latitude 42° . He sailed along the South East coast about sixty leagues in a *constant fog*; and having anchored in various places, held a friendly intercourse with the inhabitants. Thus far the Journal. Now, as the islands of Matimai, Kunathir, and Zellany appear, from Captain Spanberg's Discoveries, to lie exactly in this situation, there can be no doubt of their being the same land; and the circumstance of the fog sufficiently accounts for the error of De Vries, in imagining them

1779.
October.

nearly in the same direction, together with the group first mentioned, according to the Russian charts, we thought this coast deserved the preference, and accordingly hauled round to the Westward, the wind having shifted, in the afternoon, to the Northward. During this day we saw large flocks of gulls, several albatrosses, fulmars, and a number of fish, which our sailors called grampuses; but, as far as we could judge, from the appearance of those that passed close by the ships, we imagined them to be the *kasatka*, or sword-fish, described by Krascheninickoff, to whom I refer the Reader, for a curious account of the manner in which they attack the whales. In the evening, a visit from a small land bird, about the size of a gold-finch, and resembling that bird in shape and plumage, made us keep a good look-out for land. However, at midnight, on trying for soundings, we found no ground with forty-five fathoms of line.

them to be one continent; without having recourse to the supposition of an earthquake, by which Mr. Muller, from his desire to reconcile the opinion generally received, with the later Russian discoveries, conceives the several parts to have been separated. The Journal then proceeds to give an account of the discovery of Staten Island and Company's Land, of which I have already given my opinion, and shall have occasion to speak hereafter. Having passed through the Straits of De Vries, says the Journal, they entered a vast, wild, and tempestuous sea, in which they steered, through mists and darkness, to the 48° latitude North; after which they were driven by contrary winds to the Southward, and again fell in with land to the Westward, in latitude 45°, which they unaccountably still imagined to be part of the continent of Jesso; whereas, whoever examines Jansen's map of their discoveries (which appears to be exceedingly accurate, as far as his information went), will, I believe, have no doubt, that they were, at this time, on the coast of Tartary. Having traced this land four degrees to the Northward, they returned to the Southward through the Straits they had passed before.

It is not necessary to trouble the Reader with the Journal of the Breskes, as it contains no new matter, and has been already republished, and very satisfactorily animadverted upon by Mr. Muller.

Voyages from Asia to America, &c. English Translation, p. 78.

On:

1779.
October.
Sunday 17.

On the 17th, at noon, we were in latitude $45^{\circ} 7'$, by observation, longitude $154^{\circ} 0'$. The wind now again coming to the Westward, obliged us to steer a more Southerly course; and, at midnight, it blew from that quarter a fresh gale, accompanied with heavy rain. In the morning, we saw another land-bird, and many flocks of gulls and peterels bending their course to the South West. The heavy North East swell, with which we had constantly laboured since our departure from Lopatka, now ceased, and changed suddenly to the South East. In the forenoon of the 18th, we passed great quantities of rock-weed, from which, and the flights of birds above mentioned, we conjectured we were at no great distance from the Southernmost of the Kuriles; and, at the same time, the wind coming round to the South, enabled us to stand in for it. At two, we set studding-sails, and steered West; but the wind increasing to a gale, soon obliged us to double reef the topails; and, at midnight, we judged it necessary to try for soundings. Accordingly we hove to; but, finding no bottom at seventy-five fathoms, we were encouraged to persevere, and again bore away West, with the wind at South East. This course we kept till two in the morning, when the weather becoming thick, we hauled our wind, and steered to the South West till five, when a violent storm reduced us to our courses.

Tuesday 19.

Notwithstanding the unfavourable state of the weather left us little prospect of making the land, we still kept this object anxiously in view; and, at day-light, ventured to steer West by South, and continued to stand on in this direction till ten in the forenoon, when the wind, suddenly shifting to the South West, brought with it clear weather. Of this we had scarcely taken advantage, by setting the topails, and letting out the reefs, when it began to blow so strong

1779.
October.

strong from this quarter, that we were forced to close-reeve again; and, at noon, the wind shifting two points to the West, rendered it vain to keep any longer on this tack. We therefore put about, and steered to the Southward. At this time, our latitude, by observation, was $44^{\circ} 12'$, and longitude $150^{\circ} 40'$; so that, after all our efforts, we had the mortification to find ourselves, according to the Russian charts, upon a meridian with Nadeegsda, which they make the Southernmost of the Kurile islands, and about twenty leagues to the Southward.

But, though the violent and contrary winds we had met with during the last six days, prevented our getting in with these islands, yet the course we had been obliged to hold, is not without its geographical advantages. For the group of islands, consisting of the Three Sisters, Kunashir and Zellany, which, in D'Anville's maps, are placed in the track we had just crossed; being, by this means, demonstratively removed from that situation, an additional proof is obtained of their lying to the Westward, where Spanberg actually places them, between the longitude 142° and 147° . But as this space is occupied, in the French charts by part of the supposed land of Jeso and Staten Island, Mr. Muller's opinion becomes extremely probable, that they are all the same lands; and as no reasons appear for doubting Spanberg's accuracy, we have ventured, in our general map, to reinstate the Three Sisters, Zellany, and Kunashir, in their proper situation, and have entirely omitted the rest. When the Reader recollects the manner in which the Russians have multiplied the islands of the Northern Archipelago, from the want of accuracy in determining their real situation, and the desire men naturally feel of propagating new discoveries, he will not be surprized, that the same causes should produce the

1779.
October.

same effects. It is thus that the Jessoian lands, which appear, both from the accounts of the Japanese, and the earliest Russian traditions, to be no other than the Southern Kurile islands, have been supposed distinct from the latter. The land of De Gama is next on record; and was originally placed nearly in the same situation with those just mentioned; but was removed, as has been already suggested, to make room for Staten Island, and the Company's Land; and as Jesso, and the Southernmost of the Kuriles, had also possession of this space, that nothing might be lost, they were provided for, the former a little to the Westward, and the latter to the Eastward.

Wednes. 20.

As the islands of Zellany and Kunashir, according to the Russian charts, were still to the Southward, we were not without hopes of being able to make them, and therefore kept our head as much to the Westward as the wind would permit. On the 20th, at noon, we were in latitude $43^{\circ} 47'$, and longitude $150^{\circ} 30'$; and, steering West by South, with a moderate breeze from South East, and probably not more than twenty-four leagues to the Eastward of Zellany, when our good fortune again deserted us. For, at three o'clock in the afternoon, the wind veering round to the North West, began to blow so strong, that we were brought under our foresail and mizen stay-sail. We had very heavy squalls, and hard rain during the next twenty-four hours; after which, the horizon clearing a little, and the weather growing moderate, we were enabled to set the topsails; but the wind, still continuing to blow from the North West, baffled all our endeavours to make the land, and obliged us, at last, to give up all further thoughts of discovery to the North of Japan. We submitted to this disappointment with the greater reluctance, as the accounts that are given of the inhabitants

inhabitants of these islands, mentioned at the end of the last Chapter, had excited in us the greater curiosity to visit them.

1779.
October.

In the afternoon, the leach-rope of the Resolution's fore-top-fail gave way, and split the fail. As this accident had often happened to us in Captain Cook's life-time, he had ordered the foot and leach-ropes of the topfails to be taken out, and larger fixed in their stead; and as these also proved unequal to the strain that was on them, it is evident, that the proper proportion of strength between those ropes and the fail is exceedingly miscalculated in our service. This day a land-bird perched on the rigging, and was taken; it was larger than a sparrow, but, in other respects, very like one.

The gale now abated gradually; so that, in the morning of the 22d, we let out the reefs of the topfails, and made more fail. At noon, we were in latitude $40^{\circ} 58'$, and longitude $148^{\circ} 17'$; the variation 3° East. In the afternoon, another little wanderer from the land pitched on the ship, and was so worn out with fatigue, that it suffered itself to be taken immediately, and died a few hours afterward. It was not bigger than a wren, had a tuft of yellow feathers on its head, and the rest of its plumage like that of the linner. The sparrow, being stronger, lived a long time. These birds plainly indicating, that we could not be at any great distance from the land, and the wind, after varying a little, fixing in the evening at North, our hopes of making the land again revived, and we hauled up to the West North West, in which direction, the Southernmost islands, seen by Spanberg, and said to be inhabited by hairy men, lay at the distance of about fifty leagues. But the wind not keeping

Friday 22.

1779.
October.
Saturday 23.

pace with our wishes, blew in such light airs, that we made little way, till eight the next morning, when we had a fresh breeze from the South South West, with which we continued to steer West North West till the evening. At noon, we were in latitude $40^{\circ} 35'$, longitude $146^{\circ} 45'$; the latter deduced from several lunar observations taken during the night. The variation of the needle we found to be $17'$ East. In the evening, we had strong squally gales attended with rain, and having passed, in the course of the day, several patches of green grass, and seen a shag, many small land birds, and flocks of gulls, it was not thought prudent, with all these signs of the vicinity of land, to stand on during the whole night. We therefore tacked at midnight, and steered a few hours to the South East, and at four in the morning of the 24th, again directed our course to the West North West, and carried a press of sail till seven in the evening, when the wind shifted from South South West to North, and blew a fresh gale. At this time we were in the latitude of $40^{\circ} 57'$, and the longitude of $145^{\circ} 20'$.

Sunday 24.

This second disappointment, in our endeavours to get to the North West, together with the boisterous weather we had met with, and the little likelihood, at this time of the year, of its becoming more favourable to our views, were Captain Gore's motives for now finally giving up all farther search for the islands to the North of Japan, and for shaping a course West South West, for the North part of that island. In the night, the wind shifted to the North East, and blew a fresh gale, with hard rain, and hazy weather, which, by noon of the 25th, brought us to the latitude of $40^{\circ} 18'$, in the longitude $144^{\circ} 0'$. To-day we saw flights of wild ducks, a pigeon lighted on our rigging, and many birds,

Monday 25.

View of the Coast of JAPAN when we first saw it, The Hill A bearing West 3 miles distant.



Birds, like linnets, flew about us with a degree of vigour that seemed to prove, they had not been long upon the wing. We also passed patches of long grass, and a piece either of sugar-cane or bamboo. These signs, that land was at no great distance, induced us to try for soundings; but we found no ground with ninety fathoms of line. Toward evening, the wind by degrees shifted round to the South, with which we still kept on to the West South West; and at day-break of the 26th, we had the pleasure of descrying high land to the Westward, which proved to be Japan. At eight, it extended from North West to South by West, distant three or four leagues. A low flat cape bore North West three-quarters West, and seemed to make the South part of the entrance of a bay. Toward the South extreme, a conical shaped hill bore South by West three-quarters West. To the Northward of this hill there appeared to be a very deep inlet, the North side of the entrance into which is formed by a low point of land, and, as well as we could judge by our glasses, has a small island near it to the Southward.

1779.
October.

Tuesday 26.

We stood on till nine, when we were within two leagues of the land, bearing West three-quarters South, and had soundings of fifty-eight fathoms, with a bottom of very fine sand. We now tacked and stood off; but the wind dying away, at noon we had got no farther than three leagues from the coast, which extended from North West by North three-quarters West, to South half East, and was, for the most part, bold and cliffy. The low cape to the Northward bore North West by West, six leagues distant; and the North point of the inlet South, three-quarters West. The latitude, by observation, was $40^{\circ} 5'$, and longitude $142^{\circ} 28'$. The Northernmost land in sight, we judged to be the Northernmost

1779.
October.

Northern extremity of Japan*. It is lower than any other part; and, from the range of the high lands that were seen over it from the mast-head, the coast appeared evidently to incline round to the Westward. The North point of the inlet we supposed to be Cape Nambu, and the town to be situated in a break of the high land, toward which the inlet seemed to direct itself†. The country is of a moderate height, consists of a double range of mountains; it abounds with wood, and has a pleasing variety of hills and dales. We saw the smoke of several towns or villages, and many houses near the shore, in pleasant and cultivated situations.

During the calm, being willing to make the best use of our time, we put our fishing lines overboard, in ten fathoms water, but without any success. As this was the only amusement our circumstances admitted, the disappointment was always very sensibly felt, and made us look back with regret to the cod-banks of the dreary regions we had left, which had supplied us with so many wholesome meals, and, by the diversion they afforded, had given a variety to the wearisome succession of gales and calms, and the tedious repetition of the same nautical observations. At two in the afternoon, the breeze freshened from the Southward, and, by four, had brought us under close-reefed topsails,

* The only authentic survey of the Eastern coast of Japan, with which I am acquainted, is that published by Jansen in his Atlas, and compiled with great accuracy from the charts and journals of the Castricom and Brasques. I have therefore adopted, wherever the identity of the situations could be nearly ascertained, the names given in that map to the corresponding points and head-lands seen by us along the coast.

Jansen places the Northern extremity of Japan, in latitude $40^{\circ} 15'$. The point seen by us was in latitude $40^{\circ} 27'$.

† This town is called by Jansen, Nabo.

and

and obliged us to stand off to the South East. In consequence of this course, and the haziness of the weather, the land soon disappeared. We kept on all night, and till eight the next morning, when the wind coming round to the North, and growing moderate, we made sail, and steered West South West, toward the land; but did not make it till three in the afternoon, when it extended from North West half West to West. The Northernmost extreme being a continuation of the high land, which was the Southernmost we had seen the day before; the land to the West we conceived to be the Hofe Tafel Berg (the High Table Hill) of Jansen. Between the two extremes, the coast was low and scarcely perceptible, except from the mast-head. We stood on toward the coast till eight, when we were about five leagues distant; and having shortened sail for the night, steered to the Southward, sounding every four hours; but never found ground with one hundred and sixty fathoms of line.

17-9
October.

Wednes. 27-

On the 28th, at six in the morning, we again saw land, twelve leagues to the Southward of that seen the preceding day, extending from West South West to West by North. We steered South West obliquely with the shore; and, at ten, saw more land open to the South West. To the Westward of this land, which is low and flat, are two islands, as we judged, though some doubts were entertained, whether they might not be connected with the adjacent low ground. The hazy weather, joined to our distance, prevented us also from determining, whether there are any inlets or harbours between the projecting points, which seem here to promise good shelter. At noon, the North extreme bore North West by North, and a high peaked hill, over a steep head-land, West by North, distant five leagues. Our latitude at this time, by observation, was $38^{\circ} 16'$, longitude $142^{\circ} 9'$. The

Thursday 28.

1779.
October.

mean of the variation, from observations taken both in the fore and afternoon, was $1^{\circ} 20'$ East.

Friday 29.

At half past three in the afternoon, we lost sight of the land; and, from its breaking off so suddenly, conjectured, that what we had seen this day is an island, or, perhaps, a cluster of islands, lying off the main land of Japan; but as the islands, called by Jansen the Schildpads, and by Mr. D'Anville Matsima, though laid down nearly in the same situation, are not equal in extent to the land seen by us, we must leave this point undecided. Having kept a South West course during the remaining part of the day, we found ourselves, at midnight, in seventy fathoms water, over a bottom of fine dark brown sand. We therefore hauled up to the Eastward, till morning, when we saw the land again, about eleven leagues to the Southward of that which we had seen the day before; and at eight, we were within six or seven miles of the shore, having carried in regular soundings from sixty-five to twenty fathoms, over coarse sand and gravel. Unluckily there was a haze over the land, which hindered our distinguishing small objects on it. The coast is straight and unbroken, and runs nearly in a North and South direction. Toward the sea the ground is low, but rises gradually into hills of a moderate height, whose tops are tolerably even, and covered with wood.

At nine o'clock, the wind shifting to the Southward, and the sky lowering, we tacked and stood off to the East, and soon after, we saw a vessel, close in with the land, standing along the shore to the Northward, and another in the offing, coming down on us before the wind. Objects of any kind, belonging to a country so famous, and yet so little known, it will be easily conceived, must have excited a general curi-

osity,

1779.
October.

osity, and accordingly every soul on board was upon deck in an instant, to gaze at them. As the vessel to windward approached us, she hauled farther off shore; upon which, fearing that we should alarm them by the appearance of a pursuit, we brought the ships to, and she passed ahead of us, at the distance of about half a mile. It would have been easy for us to have spoken with them; but perceiving, by their manœuvres, that they were much frightened, Captain Gore was not willing to augment their terrors; and, thinking that we should have many better opportunities of communication with this people, suffered them to go off without interruption. Our distance did not permit us to remark any particulars regarding the men on board, who seemed to be about six in number, especially as the haziness of the weather precluded the use of our glasses. According to the best conjectures we were able to form, the vessel was about forty tons burthen. She had but one mast, on which was hoisted a square sail, extended by a yard aloft, the braces of which worked forward. Half-way down the sail, came three pieces of black cloth, at equal distances from each other. The vessel was higher at each end than in the midship; and we imagined, from her appearance and form, that it was impossible for her to sail any otherwise than large.

At noon, the wind freshened, and brought with it a good deal of rain; by three, it had increased so much, that we were reduced to our courses; at the same time, the sea ran as high as any one on board ever remembered to have seen it. If the Japanese vessels are, as Kämpfer describes them, open in the stern, it would not have been possible for those we saw, to have survived the fury of this storm; but as the appearance of the weather, all the preceding part of the

1779.
October.

day, foretold its coming, and one of the sloops had, notwithstanding, stood far out to sea, we may safely conclude, that they are perfectly capable of bearing a gale of wind. Spanberg indeed describes two kinds of Japanese vessels; one answering to the above description of Kämpfer; the other, which he calls buffes, and in which, he says, they make their voyages to the neighbouring islands, exactly corresponds with those we saw *.

At eight in the evening, the gale shifted to the West, without abating the least in violence, and by raising a sudden swell, in a contrary direction to that which prevailed before, occasioned the ships to strain and labour exceedingly. During the storm, several of the sails were split on board the Resolution. Indeed they had been so long bent, and were worn so thin, that this accident had of late happened to us almost daily, in both ships; especially when being stiff and heavy with the rain, they became less able to bear the shocks of the violent and variable winds we at this time experienced. The gale at length growing moderate, and settling to the West, we kept upon a wind to the Southward; and at nine in the morning of the 30th, we saw the land, at the distance of about fifteen leagues, bearing from West by North to North West one quarter West. It appeared in detached parts; but whether they were small islands, or parts of Japan, our distance did not enable us to determine. At noon, it extended from North West to West, the nearest land being about thirteen leagues distant, beyond which the coast seemed to run in a Westerly direction. The latitude, by observation, was $36^{\circ} 41'$, longitude $142^{\circ} 6'$. The point to the Northward, which was supposed to be near the

Saturday 30.

* Vide Muller, Fr. ed. page 215.

Southernmost land seen the day before, we conjectured to be Cape de Kennis, and the break to the Southward of this point, to be the mouth of the river on which the town of Gissima is said to be situated. The next cape is probably that called in the Dutch charts Boontje's Point, and the Southernmost, off which we were abreast at noon, we suppose to be near Low Point*, and that we were at too great a distance to see the low land, in which it probably terminates, to the Eastward.

1779.
October.

In the afternoon, the wind veering round to the North East, we stood to the Southward, at the distance of about eighteen leagues from the shore, trying for soundings, as we went along, but finding none with one hundred and fifteen fathoms of line. At two the next morning, it shifted to West, attended with rain and lightning, and blowing in heavy squalls. During the course of the day, we had several small birds of a brown plumage, resembling linnets, flying about us, which had been forced off the land by the strong West-erly gales; but toward the evening, the wind coming to the North West, we shaped our course, along with them, to West South West, in order to regain the coast. In the morning of the 1st of November, the wind again shifted to South East, and bringing with it fair weather, we got forty-two sets of distances of the moon from the sun and stars, with four different quadrants, each set consisting of six observations; these agreeing pretty nearly with each other, fix our situation at noon the same day, with great accuracy, in longitude $141^{\circ} 32'$, the latitude, by observation, was $35^{\circ} 17'$. We found an error of latitude, in our reckonings of the preceding day, of eight miles, and in this day's of seventeen;

Sunday 31.

November.
Monday 1.

* *Lage Hoeck*, or Low Point, is placed by Jansen in latitude $36^{\circ} 40'$.

1779.
November.

from whence, and from our being much more to the Eastward than we expected, we concluded, that there had been a strong current from the South West.

At two in the afternoon, we again made the land to the Westward, at the distance of about twelve leagues; the Southernmost land in sight, which we supposed to be White Point*, bore West South West half West; a hummock to the Northward, which had the appearance of being an island, bore North North West half West, within which we saw from the mast-head low land, which we took to be Sand-down Point†. We stood in toward the land, till half past five, when we hauled our wind to the Southward. At this time we saw a number of Japanese vessels, close in with the land, several seemingly engaged in fishing, and others standing along shore. We now discovered to the Westward a remarkably high mountain, with a round top, rising far inland. There is no high ground near it, the coast being of a moderate elevation, and, as far as we could judge, from the haziness of the horizon, much broken by small inlets. But to the Southward of the hummock island before mentioned, there appeared, at a great distance, within the country, a ridge of hills, stretching in a direction toward the mountain, and probably joining with it. As this is the most remarkable hill on the coast, we could have wished to have settled its situation exactly; but having only had this single view, were obliged to be contented with such accuracy as our circumstances would allow. Its latitude therefore we conceive to be $35^{\circ} 20'$, its longitude, estimated by its distance from the ships, at this time fifteen leagues, $140^{\circ} 26'$.

* *White Head*, placed by Jansen in latitude $35^{\circ} 24'$.

† *Sandowne Head*, in latitude $35^{\circ} 55'$. Jansen.

As the Dutch charts make the coast of Japan extend about ten leagues to the South West of White Point, at eight we tacked, and stood off to the Eastward, in order to weather the point. At midnight, we again tacked to the South West, expecting to fall in with the coast to the Southward, but were surprized, in the morning at eight, to see the hummock, at the distance only of three leagues, bearing West North West. We began, at first, to doubt the evidence of our senses, and afterward to suspect some deception from a similitude of land; but, at noon, we found ourselves, by observation, to be actually in latitude $35^{\circ} 43'$, at a time when our reckonings gave us $34^{\circ} 48'$. So that, during the eight hours in which we supposed we had made a course of nine leagues to the South West, we had in reality been carried eight leagues from the position we left, in a direction diametrically opposite; which made, on the whole, in that short space of time, a difference, in our reckoning, of seventeen leagues. From this error, we calculated, that the current had set to the North East by North, at the rate of at least five miles an hour. Our longitude, at this time, was $141^{\circ} 16'$.

1779.
November.

Tuesday 2.

The weather having now the same threatening appearance as on the 29th of October, which was followed by so sudden and severe a gale, and the wind continuing at South South East, it was thought prudent to leave the shore, and stand off to the Eastward, to prevent our being entangled with the land. Nor were we wrong in our prognostications; for it soon afterward began, and continued till next day, to blow a heavy gale, accompanied with hazy and rainy weather. In the morning of the 3d, we found ourselves, by our reckoning, upward of fifty leagues from the land; which circumstance, together with the very extraordinary

Wednes. 3.

1779.
November.

dinary effect of currents we had before experienced; the late season of the year, the unsettled state of the weather, and the little likelihood of any change for the better, made Captain Gore resolve to leave Japan altogether, and prosecute our voyage to China; hoping, that as the track he meant to pursue had never yet been explored, he should be able to make amends, by some new discovery, for the disappointments we had met with on this coast.

If the reader should be of opinion that we quitted this object too hastily, in addition to the facts already stated, it ought to be remarked, Kämpfer describes the coast of Japan as the most dangerous in the whole world*; that it would have been equally dangerous, in case of distress, to run into any of their harbours; where we know, from the best authorities, that the aversion of the inhabitants to any intercourse with strangers, has led them to commit the most atrocious barbarities; that our ships were in a leaky condition; that our sails were worn out, and unable to withstand a gale of wind; and that the rigging was so rotten as to require constant and perpetual repairs.

As the strong currents, which set along the Eastern coast of Japan, may be of dangerous consequence to the navigator, who is not aware of their extraordinary rapidity, I shall take leave of this island, with a summary account of their force and direction, as observed by us from the 1st to the 8th of November. On the 1st, at which time we were about eighteen leagues to the Eastward of White Point, the current set North East and by North, at the rate of three miles an hour; on the 2d, as we approached the shore, we

* See Kämpfer's Hist. of Japan, Vol. I. p. 92, 93, 94, and 102.

found it continuing in the same direction, but increased in its rapidity to five miles an hour; as we left the shore it again became more moderate and inclined to the Eastward; on the 3d, at the distance of sixty leagues, it set to the East North East, three miles an hour; on the 4th and 5th, it turned to the Southward, and at one hundred and twenty leagues from the land, its direction was South East, and its rate not more than a mile and half an hour: on the 6th and 7th, it again shifted round to the North East, its force gradually diminishing till the 8th; when we could no longer perceive any at all.

1779.
November.

During the 4th and 5th, we continued our course to the South East, having very unsettled weather, attended with much lightning and rain. On both days we passed great quantities of pumice stone, several pieces of which we took up and found to weigh from one ounce to three pounds. We conjectured that these stones had been thrown into the sea, by eruptions of various dates, as many of them were covered with barnacles, and others quite bare. At the same time, we saw two wild ducks, and several small land birds, and had many porpusses playing round us.

Thursday 4.
Friday 5.

On the 6th, at day-light, we altered our course to the South South West; but at eight in the evening, we were taken back, and obliged to steer to the South East. On the 7th, at noon, we saw a small land bird, our latitude, by observation at this time, being $33^{\circ} 52'$, and longitude $148^{\circ} 42'$. On the 9th, we were in latitude $31^{\circ} 46'$, longitude $146^{\circ} 20'$, when we again saw a small land bird, a tropic bird, porpusses, flying fishes, and had a great swell from the East South East. We continued our course to the South West, having the winds from the Northward, without any

Saturday 6.

Sunday 7.

Tuesday 9.

1779.
November.

Friday 12.

remarkable occurrence, till the 12th, when we had a most violent gale of wind from the same quarter, which reduced us to the fore-fail, and mizen stay-fail; and, as the weather was so hazy, that we were not able to see a cable's length before us, and many shoals and small islands are laid down in our charts, in this part of the ocean, we brought to, with our heads to the South West. At noon, the latitude, by account, was $27^{\circ} 36'$, longitude $144^{\circ} 25'$. In the morning of

Saturday 13.

the 13th, the wind shifting round to the North West, brought with it fair weather; but though we were at this time nearly in the situation given to the island of St. Juan, we saw no appearance of land. We now bore away to the South West, and set the top-sails, the gale still continuing with great violence. At noon, the latitude, by observation, was $26^{\circ} 0'$, longitude $143^{\circ} 40'$, and variation $3^{\circ} 50'$ East. In the afternoon, we saw flying fish, and dolphins, also tropic birds, and albatrosses. We still continued to pass much pumice stone: indeed, the prodigious quantities of this substance, which float in the sea, between Japan and the Bashee Islands, seem to indicate, that some great volcanic convulsion must have happened in this part of the Pacific Ocean; and, consequently, give some degree of probability to the opinion of Mr. Muller, which I have already had occasion to mention, respecting the separation of the continent of Jesso, and the disappearance of Company's Land, and Staten Island.

At six in the afternoon, we altered our course to the West South West, Captain Gore judging it useless to steer any longer to the South South West, as we were near the meridian of the Ladrones, or Marianne Islands, and at no great distance from the track of the Manilla ships. In the morning of the 14th,

Sunday 14

the

... ..

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

[illegible]

...the ... of ...



North ↑

View of *SULPHUR* Island bearing *LINE*

Hill on the *Sth* Part



SULPHUR Island { Lat $24^{\circ} 48' N$
Long $69^{\circ} 32' E$
Var $1^{\circ} 15' E$



View of *North* Island

View of *South* Island

South ↑



Nautical Miles

Harbor

1779.
November.

the weather became fine, and the wind, which was moderate, gradually shifted to the North East, and proved to be the trade-wind. At ten, Mr. Trevenen, one of the young gentlemen who came along with me into the Discovery, saw land appearing, like a peaked mountain, and bearing South West. At noon, the latitude, by observation, was $24^{\circ} 37'$, longitude $142^{\circ} 2'$. The land, which we now discovered to be an island, bore South West half West, distant eight or ten leagues; and at two in the afternoon, we saw another to the West North West. This second island, when seen at a distance, has the appearance of two; the South point consisting of a high conical hill, joined by a narrow neck to the Northern land, which is of a moderate height. As this was evidently of greater extent than the island to the South, we altered our course toward it. At four, it bore North West by West; but, not having day light sufficient to examine the coast, we stood upon our tacks during the night.

On the 15th, at six in the morning, we bore away for the South point of the larger island, at which time we discovered another high island, bearing North three quarters West, the South island being on the same rhomb line, and the South point of the island ahead, West by North. At nine, we were abreast, and within a mile of the middle island, but Captain Gore, finding that a boat could not land without some danger from the great surf that broke on the shore, kept on his course to the Westward. At noon, our latitude, by observation, was $24^{\circ} 50'$, longitude $140^{\circ} 56'$ East. Monday 15.

This island is about five miles long, in a North North East, and South South West direction. The South point is

1779.
November.

a high barren hill, flattish at the top, and when seen from the West South West, presents an evident volcanic crater. The earth, rock, or sand, for it was not easy to distinguish of which its surface is composed, exhibited various colours, and a considerable part we conjectured to be sulphur, both from its appearance to the eye, and the strong sulphureous smell which we perceived, as we approached the point. Some of the officers on board the Resolution, which passed nearer the land, thought they saw steams rising from the top of the hill. From these circumstances, Captain Gore gave it the name of *Sulphur Island*. A low, narrow, neck of land connects this hill with the South end of the island, which spreads out into a circumference of three or four leagues, and is of a moderate height. The part near the isthmus has some bushes on it, and has a green appearance, but those to the North East are very barren, and full of large detached rocks, many of which were exceedingly white. Very dangerous breakers extend two miles and a half to the East, and two miles to the West off the middle part of the island, on which the sea broke with great violence.

The North and South islands appeared to us as single mountains, of a considerable height; the former peaked, and of a conical shape; the latter more square and flat at the top. Sulphur Island we place in latitude $24^{\circ} 48'$, longitude $141^{\circ} 12'$. The North island in latitude $25^{\circ} 14'$, longitude $141^{\circ} 10'$. The South island in latitude $24^{\circ} 22'$, and longitude $141^{\circ} 20'$. The variation observed was $3^{\circ} 30'$ East.

Captain Gore now directed his course to the West South West, for the Bashee Islands, hoping to procure, at them, such

Such a supply of refreshments as would help to shorten his stay in Macao. These islands were visited by Dampier, who gives a very favourable account, both of the civility of the inhabitants, and of the plenty of hogs and vegetables, with which the country abounds: they were afterward seen by Byron and Wallis, who passed them without landing.

1779.
November.

In order to extend our view in the day time, the ships spread between two and three leagues from each other, and during the night, we went under an easy sail; so that it was scarcely possible to pass any land that lay in the neighbourhood of our course. In this manner we proceeded, without any occurrence worth remarking, with a fresh breeze from the North East, till the 22d, when it increased to a strong gale, with violent squalls of wind and rain, which brought us under close reefed top-sails.

Monday 22d

At noon of the 23d, the latitude, by account, was $21^{\circ} 5'$, and longitude $123^{\circ} 20'$; at six in the evening, being now only twenty-one leagues from the Bashee islands, according to the situation in Mr. Dalrymple's map, and the weather squally attended with a thick haze, we hauled our wind to the North North West, and handed the fore top-sail.

Tuesday 23d

During the whole of the 24th it rained incessantly, and the wind still blew a storm; a heavy sea rolled down on us from the North, and in the afternoon we had violent flashes of lightning from the same quarter. We continued upon a wind to the North North West till nine o'clock, when we tacked, and stood to the South South East, till four in the morning of the 25th, and then wore. During the night, there was an eclipse of the moon, but the rain prevented

Wednes. 24d

Thursday 25d

1779.
November.

our making any observation ; unfortunately, at the time of the greatest darkness, a seaman, in flogging the main top-mast stay-fail, fell overboard, but laying hold of a rope, which providentially was hanging out of the fore-chains into the water, and the ship being quickly brought in the wind, he was got on board without any other hurt than a slight bruise on his shoulder. At eight, the weather clearing, we bore away, but the wind blew still so strong, that we carried no other fail than the fore-fail, and the main top-fail close reefed. About this time we saw a land bird resembling a thrush, and a sugar cane ; at noon, the latitude, by observation, was $21^{\circ} 35'$, and longitude $121^{\circ} 35'$.

As our situation in longitude was now to the West of the Bashee, according to Mr. Dalrymple's maps, I perceived that Captain Gore was governed, in the course he was steering, by the opinions of Commodore Byron and Captain Wallis, with whom he sailed when they passed these islands. The former placing it near four degrees to the Westward, or in longitude $118^{\circ} 14'$. In consequence of this opinion, at two, we stood to the Southward, with a view of getting into the same parallel of latitude with the islands, before we ran down our longitude. At six, we were nearly in that situation, and consequently ought to have been in sight of land, according to Mr. Wallis's account, who places the Bashees near three degrees more to the Eastward than Mr. Byron. The gale, at this time, had not in the least abated ; and Captain Gore, still conceiving that the islands must undoubtedly lie to the Westward, brought the ships to, with their heads to the North West, under the fore-fail and balanced mizen.

At

At six in the morning of the 26th, the wind having considerably abated, we bore away West; set the top-sails, and let out the reefs. At noon, the latitude, by observation, was $21^{\circ} 12'$, and longitude $120^{\circ} 25'$. We saw, this day, a flock of ducks, and many tropic birds, also dolphins and porpoises, and still continued to pass several pumice stones. We spent the night upon our racks, and, at six in the morning of the 27th, again bore away West in search of the Bashees.

1779.
November.
Friday 26.

Saturday 27.

I now began to be a little apprehensive, lest in searching for those islands, we should get so much to the Southward as to be obliged to pass to leeward of the Pratas. In this case, it might have been exceedingly difficult for such bad sailing ships as ours to fetch Macao, particularly should the wind continue to blow, as it now did, from the North North East and North. As I had some doubts whether Mr Dalrymple's charts were on board the Resolution, I made sail and hailed her; and having acquainted Captain Gore with the position of these shoals, and my apprehensions of being driven to the Southward, he informed me that he should continue on his course for the day, as he was still in hopes of finding Admiral Byron's longitude right; and therefore ordered me to spread a few miles to the South.

At noon, the weather became hazy; the latitude, by reckoning, was $21^{\circ} 2'$, and longitude $118^{\circ} 30'$; and at six, having got to the Westward of the Bashees, by Mr. Byron's account, Captain Gore hauled his wind to the North West, under an easy sail; the wind blowing very strong, and there being every appearance of a dirty boisterous night. At four in the morning of the 28th, we saw the Resolution, then half a mile ahead of us, wear, and immediately perceived breakers

Sunday 28.

1779.
November.

breakers close under our lee. At day-light, we saw the island of Prata; and at half past six we wore again, and stood toward the shoal, and finding we could not weather it, bore away, and ran to leeward. As we passed the South side, within a mile of the reef, we observed two remarkable patches on the edge of the breakers, that looked like wrecks. At noon, the latitude found by double altitudes was $20^{\circ} 39'$, longitude $116^{\circ} 45'$. The island bore North three quarters East, distant three or four leagues. On the South West side of the reef, and near the South end of the island, we thought we saw, from the mast head, openings in the reef, which promised safe anchorage.

The Prata shoal is of a considerable extent, being six leagues from North to South, and stretching three or four leagues to the Eastward of the island; its limit to the Westward we were not in a situation to determine. The North East extremity we place in latitude $20^{\circ} 5'$, and longitude 117° ; and the South West in latitude $20^{\circ} 45'$, and longitude $116^{\circ} 44'$.

For the remaining part of the day we carried a press of sail, and kept the wind, which was North East by North, in order to secure our passage to Macao. It was fortunate, that toward evening the wind favoured us, by changing two points more to the East; for had the wind and weather continued the same as during the preceding week, I doubt whether we could have fetched that port, in which case we must have born away for Batavia; a place we all dreaded exceedingly, from the sad havoc the unhealthiness of the climate had made in the crews of the former ships that had been out on discovery, and had touched there.

In the forenoon of the 29th, we passed several Chinese fishing boats, who eyed us with great indifference. They fish with a large dredge-net, shaped like a hollow cone, having a flat iron rim fixed to the lower part of its mouth. The net is made fast with cords to the head and stern of the boat, which being left to drive with the wind, draws the net after it, with the iron part dragging along the bottom. We were sorry to find the sea covered with the wrecks of boats that had been lost, as we conjectured, in the late boisterous weather. At noon, we were in latitude, by observation, $22^{\circ} 1'$, having run one hundred and ten miles upon a North West course since the preceding noon. Being now nearly in the latitude of the Lema Islands, we bore away West by North, and, after running twenty-two miles, saw one of them nine or ten leagues to the Westward. At six, the extremes of the islands in sight bore North North West half West, and West North West half West; distant from the nearest four or five leagues; the depth of water twenty-two fathoms, over a soft muddy bottom. We now shortened sail, and kept upon our tacks for the night. By Mr. Bayly's time-keeper, the Grand Lema bore from the Prata Island, North 60° West, one hundred and fifty-three miles; and by our run, North 57° West, one hundred and forty-six miles.

1779.
November.
Monday 29.

In the morning of the 30th, we ran along the Lema Isles, Tuesday 30. which, like all the other islands on this coast, are without wood, and, as far as we could observe, without cultivation. At seven o'clock, we had precisely the same view of these islands, as is represented in a plate of Lord Anson's voyage. At nine o'clock, a Chinese boat, which had been before with the Resolution, came along-side, and wanted to put on board us a pilot, which however we declined, as it was

1779.
November.

our business to follow our consort. We soon after passed the rock marked R, in Lord Anson's Plate; but, instead of hauling up to the Northward of the grand Ladrone Island, as was done in the Centurion, we proceeded to leeward.

It is hardly necessary to caution the mariner not to take this course, as the danger is sufficiently obvious; for should the wind blow strong, and the current set with it, it will be extremely difficult to fetch Macao. Indeed we might, with great safety, by the direction of Mr. Dalrymple's map, have gone either intirely to the North of the Lema isles, or between them, and made the wind fair for Macao. Our fears of missing this port, and being forced to Batavia, added to the strong and eager desires of hearing news from Europe, made us rejoice to see the Resolution soon after fire a gun, and hoist her colours as a signal for a pilot. On repeating the signal, we saw an excellent race between four Chinese boats; and Captain Gore, having engaged with the man who arrived first, to carry the ship to the Typa, for thirty dollars, sent me word, that, as we could easily follow, that expence might be saved to us. Soon after, a second pilot getting on board the Resolution, insisted on conducting the ship, and, without further ceremony, laid hold of the wheel, and began to order the sails to be trimmed. This occasioned a violent dispute, which at last was compromised, by their agreeing to go shares in the money. At noon, the latitude, by observation, was $21^{\circ} 57'$ North, and longitude $114^{\circ} 2'$ East; the grand Ladrone island extending from North West half North, to North half West, distant four miles. The land of which the bearings are here given, we conceived to be one island; but afterward found the Western part to be the island marked z in Mr. Dalrymple's

6

chart

chart of part of the coast of China, &c. which, at that time, we unfortunately had not on board.

1779.
November.

In obedience to the instructions given to Captain Cook by the Board of Admiralty, it now became necessary to demand of the officers and men their Journals, and what other papers they might have in their possession, relating to the history of our voyage. The execution of these orders seemed to require some delicacy, as well as firmness. I could not be ignorant, that the greatest part of our officers, and several of the seamen, had amused themselves with writing accounts of our proceedings for their own private satisfaction, or that of their friends, which they might be unwilling, in their present form, to have submitted to the inspection of strangers. On the other hand, I could not, consistently with the instructions we had received, leave in their custody papers, which, either from carelessness or design, might fall into the hands of printers, and give rise to spurious and imperfect accounts of the voyage, to the discredit of our labours, and perhaps to the prejudice of officers, who, though innocent, might be suspected of having been the authors of such publications. As soon, therefore, as I had assembled the ship's company on deck, I acquainted them with the orders we had received, and the reasons which, I thought, ought to induce them to yield a ready obedience. At the same time, I told them, that any papers which they were desirous not to have sent to the Admiralty, should be sealed up in their presence, and kept in my own custody, till the intentions of the Board, with regard to the publication of the History of the Voyage, were fulfilled; after which, they should faithfully be restored back to them.

1779.
November.

It is with the greatest satisfaction I can relate, that my propofals met with the approbation, and the cheerful compliance both of the officers and men; and I am perfuaded, that every fcrap of paper, containing any tranfactions relating to the voyage, were given up. Indeed it is doing bare juftice to the feamen of this fhip to declare, that they were the moft obedient, and the beft difpofed men I ever knew, though almoft all of them were very young, and had never before ferved in a fhip of war.

C H A P. IX.

Working up to Macao.—A Chinese Comprador.—Sent on Shore to visit the Portuguese Governor.—Effects of the Intelligence we received from Europe.—Anchor in the Typa.—Passage up to Canton.—Bocca Tygris.—Wampû.—Description of a Sampane.—Reception at the English Factory.—Instance of the suspicious Character of the Chinese.—Of their Mode of trading.—Of the City of Canton.—Its Size.—Population.—Number of Sampans.—Military Force.—Of the Streets and Houses.—Visit to a Chinese.—Return to Macao.—Great Demand for the Sea-otter Skins.—Plan of a Voyage for opening a Fur Trade on the Western Coast of America, and prosecuting further Discoveries in the Neighbourhood of Japan.—Departure from Macao.—Price of Provisions in China.

WE kept working to windward till six in the evening, when we came to anchor, by the direction of the Chinese pilot on board the Resolution, who imagined the tide was setting against us. In this, however, he was much deceived; as we found, upon making the experiment, that it set to the Northward till ten o'clock. The next morning he fell into a similar mistake; for, at five, on the appearance of slack water, he gave orders to get under way; but the ignorance he had discovered, having put us on our

3 H 2

guard,

1779.
November.
Tuesday 30.

December.
Wednes. 1.

1779.
December.

guard, we chose to be convinced, by our own observations, before we weighed; and, on trying the tide, we found a strong under-tow, which obliged us to keep fast till eleven o'clock. From these circumstances it appears, that the tide had run down twelve hours.

During the afternoon, we kept standing on our tacks, between the island of Potoe, and the Grand Ladrone, having passed to the Eastward of the former. At nine o'clock, the tide beginning to ebb, we again came to anchor in six fathoms water; the town of Macao bearing North West, three leagues distant; and the island of Potoe South half West, two leagues distant. This island lies two leagues to the North North West of the island marked Z in Mr. Dalrymple's chart, which we, at first, took to be part of the Grand Ladrone. It is small and rocky; and off the West end there is said to be foul ground, though we passed near it without perceiving any.

Thursday 2.

In the forenoon of the 2d, one of the Chinese contractors, who are called *Compradors*, went on board the Resolution, and sold to Captain Gore two hundred pounds weight of beef, together with a considerable quantity of greens, oranges, and eggs. A proportionable share of these articles was sent to the Discovery; and an agreement made with the man to furnish us with a daily supply, for which, however, he insisted on being paid before-hand.

Our pilot, pretending he could carry the ships no farther, Captain Gore was obliged to discharge him, and we were left to our own guidance.

At two in the afternoon, the tide flowing, we weighed, and worked to windward; and, at seven, anchored in three

SKETCH of the TYPA
and

MACAO.

Lat. $22^{\circ} 9' 17''$
Typa } Lon. $113^{\circ} 48' 6''$
Var. } $0^{\circ} 10' 11'' 80$.

It was high water on the full and Change of the Moon
at 5.15 in the Typa and
at 5.50 in Macao Harbour } the greatest rise, 6 feet.



References.

for sailing into the Harbour the rocky
open between Point C & Point D.
into the Typa keep the south shore on
till the Monastery opens over Rocky
in the line E, then steer for Shoal
and $\frac{1}{2}$ in 4 fathoms water.
harbour of Macao is drawn by the Eye
Soundings taken at low water.



December 1939.

[illegible]

and a half fathoms of water, Macao bearing West, three miles distant. This situation was, indeed, very ineligible, being exposed to the North East, and having shoal water, not more than two fathoms and a half deep, to leeward; but as no nautical description is given in Lord Anson's voyage of the harbour in which the Centurion anchored, and Mr. Dalrymple's general map, which was the only one on board, was on too small a scale to serve for our direction, the ships were obliged to remain there all night.

1779.
December.

In the evening, Captain Gore sent me on shore to visit the Portuguese Governor, and to request his assistance in procuring refreshments for our crews, which he thought might be done on more reasonable terms than the *Comprador* would undertake to furnish them. At the same time, I took a list of the naval stores, of which both vessels were greatly in want, with an intention of proceeding immediately to Canton, and applying to the servants of the East India Company, who were, at that time, resident there. On my arrival at the citadel, the fort-major informed me, that the Governor was sick, and not able to see company; but that we might be assured of receiving every assistance in their power. This, however, I understood would be very inconsiderable, as they were intirely dependent on the Chinese, even for their daily subsistence. Indeed, the answer returned to the first request I made, gave me a sufficient proof of the fallen state of the Portuguese power; for, on my acquainting the Major with my desire of proceeding immediately to Canton, he told me, that they could not venture to furnish me with a boat, till leave was obtained from the *Hoppo*, or officer of the customs; and that the application for this purpose must be made to the Chinese government at Canton.

The

1779.
December.

The mortification I felt at meeting with this unexpected delay, could only be equalled by the extreme impatience with which we had so long waited for an opportunity of receiving intelligence from Europe. It often happens, that in the eager pursuit of an object, we overlook the easiest and most obvious means of attaining it. This was actually my case at present; for I was returning under great dejection to the ship, when the Portuguese officer, who attended me, asked me, if I did not mean to visit the English gentlemen at Macao. I need not add with what transport I received the information this question conveyed to me; nor the anxious hopes and fears, the conflict between curiosity and apprehension, which passed in my mind, as we walked toward the house of one of our countrymen.

In this state of agitation, it was not surprising, that our reception, though no way deficient in civility or kindness, should appear cold and formal. In our inquiries, as far as they related to objects of private concern, we met, as was indeed to be expected, with little or no satisfaction; but the events of a public nature, which had happened since our departure, and now, for the first time, burst all at once upon us, overwhelmed every other feeling, and left us, for some time, almost without the power of reflection. For several days we continued questioning each other about the truth of what we had heard, as if desirous of seeking, in doubt and suspense, for that relief and consolation, which the reality of our calamities appeared totally to exclude. These sensations were succeeded by the most poignant regret at finding ourselves cut off, at such a distance, from the scene, where, we imagined, the fate of fleets and armies was every moment deciding.

The

The intelligence we had just received of the state of affairs in Europe, made us the more exceedingly anxious to hasten our departure as much as possible; and I, therefore, renewed my attempt to procure a passage to Canton, but without effect. The difficulty arising from the established policy of the country, I was now told, would probably be much increased by an incident that had happened a few weeks before our arrival. Captain Panton, in the Seahorse, a ship of war of twenty-five guns, had been sent from Madras, to urge the payment of a debt owing by the Chinese merchants of Canton to private British subjects in the East Indies and Europe, which, including the principal and compound interest, amounted, I understood, to near a million sterling. For this purpose, he had orders to insist on an audience with the Viceroy of Canton, which, after some delay, and not without recourse being had to threats, was, at length, obtained. The answer he received, on the subject of his mission, was fair and satisfactory; but, immediately after his departure, an edict was stuck up on the houses of the Europeans, and in the public places of the city, forbidding all foreigners, on any pretence, to lend money to the subjects of the emperor.

1779.
December.

This measure had occasioned very serious alarms at Canton. The Chinese merchants, who had incurred the debt, contrary to the commercial laws of their own country, and denied, in part, the justice of the demand, were afraid that intelligence of this would be carried to Peking; and that the Emperor, who has the character of a just and rigid prince, might punish them with the loss of their fortunes, if not of their lives. On the other hand, the Select Committee, to whom the cause of the claimants was strongly recommended by the Presidency of Madras, were extremely apprehensive,

†

1779.
December.

prehensive, lest they should embroil themselves with the Chinese government at Canton; and, by that means, bring, perhaps, irreparable mischief on the Company's affairs in China. For I was further informed, that the *Mandarines* were always ready to take occasion, even on the slightest grounds, to put a stop to their trading; and that it was often with great difficulty, and never without certain expence, that they could get such restraints taken off. These impositions were daily increasing; and, indeed, I found it a prevailing opinion, in all the European factories, that they should soon be reduced either to quit the commerce of that country, or to bear the same indignities to which the Dutch are subjected in Japan.

The arrival of the *Resolution* and *Discovery*, at such a time, could not fail of occasioning fresh alarms; and, therefore, finding there was no probability of my proceeding to Canton, I dispatched a letter to the English supercargoes, to acquaint them with the cause of our putting into the *Tygris*, to request their assistance in procuring me a passport, and in forwarding the stores we wanted, of which I sent them a list, as expeditiously as possible.

Friday 3.

The next morning I was accompanied on board by our countryman, who pointing out to us the situation of the *Typha*; we weighed at half past six, and stood toward it; but the wind failing, we came to, at eight, in three and a half fathoms water; Macao, bearing West North West, three miles distant; the *Grand Ladrone* South East by South. The *Resolution* here saluted the Portuguese fort with eleven guns, which were returned by the same number. Early on the 4th, we again weighed, and stood into the *Typha*, and moored with the stream anchor and cable to the Westward.

Saturday 4.

The

The *Comprador*, whom we at first engaged with, having disappeared with a small sum of money, which had been given him to purchase provisions, we contracted with another, who continued to supply both ships, during our whole stay. This was done secretly, and in the night time, under pretence, that it was contrary to the regulations of the port; but we suspected all this caution to have been used with a view either of enhancing the price of the articles he furnished, or of securing to himself the profits of his employment, without being obliged to share them with the *Mandarines*.

1779.
December.

On the 9th, Captain Gore received an answer from the Committee of the English Supercargoes at Canton, in which they assured him, that their best endeavours should be used to procure the supplies we stood in need of, as expeditiously as possible; and that a passport should be sent for one of his officers, hoping, at the same time, that we were sufficiently acquainted with the character of the Chinese Government, to attribute any delays, that might unavoidably happen, to their true cause.

Thursday 9.

The day following, an English merchant, from one of our settlements in the East-Indies, applied to Captain Gore for the assistance of a few hands to navigate a vessel he had purchased at Macao, up to Canton. Captain Gore judging this a good opportunity for me to proceed to that place, gave orders that I should take along with me my Second Lieutenant, the Lieutenant of marines, and ten seamen. Though this was not precisely the mode in which I could have wished to visit Canton, yet as it was very uncertain when the passport might arrive, and my presence might contribute materially to the expediting of our supplies, I did not hesitate to put myself on board, having left orders with Mr.

Friday 10.

1779.
December.

Williamson, to get the Discovery ready for sea as soon as possible, and to make such additions and alterations in her upper works, as might contribute to make her more defensible. That the series of our astronomical observations might suffer no interruption by my absence, I intrusted the care of continuing them to Mr. Trevenen, in whose abilities and diligence I could repose an entire confidence.

Saturday 11.

We left the harbour of Macao on the 11th of December, and sailing round the South Eastern extremity of the island, we steered to the Northward, leaving, as we passed along, Lantao Lintin, and several smaller islands, to the right. All these islands, as well as that of Macao, which lie to the left, are entirely without wood; the land is high and barren, and uninhabited, except occasionally by fishermen. As we approached the Bocca Tygris, which is thirteen leagues from Macao, the Chinese coast appears to the Eastward in steep white cliffs; the two forts, commanding the mouth of the river, are exactly in the same state as when Lord Anson was here; that on the left is a fine old castle, surrounded by a grove of trees, and has an agreeable romantic appearance.

We were here visited by an officer of the customs; on which occasion the owner of the vessel, being apprehensive that, if we were discovered on board, it would occasion some alarm, and might be attended with disagreeable consequences, begged us to retire into the cabin below.

The breadth of the river above these forts is variable, the banks being low and flat, and subject to be overflowed by the tide to a great extent. The ground on each side is level, and laid out in rice fields; but as we advanced, it rose gradually into hills of considerable declivity, the sides of which
are

are cut into terraces, and planted with sweet potatoes, sugar-canes, yams, plantains, and the cotton-tree. We saw many lofty *pagodas*, scattered over the country, and several towns at a distance, some of which appeared to be of a considerable size.

1779.
December.

We did not arrive at Wampû, which is only nine leagues from the Bocca Tygris, till the 18th, our progress having been retarded by contrary winds, and the lightness of the vessel. Wampû is a small Chinese town, off which the ships of the different nations, who trade here, lie, in order to take in their lading. The river, higher up, is said by M. Sonnerat not to be deep enough to admit heavy laden vessels, even if the policy of the Chinese had suffered the Europeans to navigate them up to Canton; but this circumstance I cannot take upon me to decide on, as no stranger, I believe, has been permitted to inform himself with certainty of the truth. The small islands, that lie opposite to the town, are allotted to the several factories, who have built warehouses for the reception of the merchandize that is brought down from Canton.

Saturday 18.

From Wampû, I immediately proceeded in a *sampane*, or Chinese boat, to Canton, which is about two leagues and a half higher up the river. These boats are the neatest and most convenient for passengers I ever saw. They are of various sizes, almost flat at the bottom, very broad upon the beam, and narrow at the head and stern, which are raised and ornamented; the middle, where we sat, was arched over with a roof of bamboo, which may be raised or lowered at pleasure; in the sides were small windows with shutters, and the apartment was furnished with handsome mats, chairs, and tables. In the stern was placed a small

1779.
December.

waxen idol, in a case of gilt leather, before which stood a pot containing lighted tapers made of dry chips, or matches, and gum. The hire of this boat was a Spanish dollar.

I reached Canton a little after it was dark, and landed at the English factory, where, though my arrival was very unexpected, I was received with every mark of attention and civility. The Select Committee, at this time, consisted of Mr. Fitzhugh the President, Mr. Bevan and Mr. Rapier. They immediately gave me an account of such stores as the India ships were able to afford us; and though I have not the smallest doubt, that the Commanders were desirous of assisting us with every thing they could spare, consistently with a regard to their own safety, and the interest of their employers, yet it was a great disappointment to me to find in their list scarcely any articles of cordage or canvass, of both which we stood principally in need. It was, however, some consolation to understand, that the stores were in readiness for shipping, and that the provisions we required might be had at a day's notice. Wishing therefore to make my stay here as short as possible, I requested the gentlemen to procure junks or boats for me the next day, with an intention of leaving Canton the following one; but I was soon informed, that a business of that kind was not to be transacted so rapidly in this country; that leave must be first procured from the Viceroy; that the *Hoppo*, or principal officer of the customs must be applied to for *chops*, or permits; and that these favours were not granted without mature deliberation; in short, that patience was an indispensable virtue in China; and that they hoped to have the pleasure of making the factory agreeable to me, for a few days longer than I seemed willing to favour them with my company.

Though

1779.
December.

Though I was not much disposed to relish this compliment, yet I could not help being diverted with an incident that occurred very opportunely to convince me of the truth of their representations, and of the suspicious character of the Chinese. The reader will recollect, that it was now about fifteen days since Captain Gore had written to the factory, to desire their assistance in procuring leave for one of his officers to pass to Canton. In consequence of this application, they had engaged one of the principal Chinese merchants of the place, to interest himself in our favour, and to solicit the business with the Viceroy. This person came to visit the President, whilst we were talking on the subject, and with great satisfaction and complacency in his countenance acquainted him, that he had at last succeeded in his applications, and that a passport for one of the officers of the Ladrone ship (or pirate) would be ready in a few days. The President immediately told him not to give himself any farther trouble, as the officer, pointing to me, was already arrived. It is impossible to describe the terror, which seized the old man on hearing this intelligence. His head sunk upon his breast, and the sofa on which he was sitting shook, from the violence of his agitation. Whether the Ladrone ship was the object of his apprehensions, or his own government, I could not discover; but after continuing in this deplorable state a few minutes, Mr. Bevan bade him not despair, and recounted to him the manner in which I had passed from Macao, the reasons of my journey to Canton, and my wishes to leave it as soon as possible. This last circumstance seemed particularly agreeable to him, and gave me hopes, that I should find him equally disposed to hasten my departure; and yet, as soon as he had recovered the courage to speak, he began to recount the unavoidable delays that

5

would

1779.
December.

would occur in my business, the difficulty of gaining admittance to the Viceroy, the jealousies and suspicions of the *Mandarines*, respecting our real designs, which had risen, he said, to an extraordinary height, from the strange account we had given of ourselves.

After waiting several days, with great impatience, for the event of our application, without understanding that the matter was at all advanced toward a conclusion, I applied to the Commander of an English country ship, who was to sail on the 25th, and who offered to take the men and stores on board, and to lie to, if the weather should permit, off Macao, till we could send boats to take them out of his ship. At the same time he apprized me of the danger there might be of his being driven with them out to sea. Whilst I was doubting what measures to pursue, the Commander of another country ship brought me a letter from Captain Gore, in which he acquainted me, that he had engaged him to bring us down from Canton, and to deliver the stores we had procured, at his own risk, in the *Typha*. All our difficulties being thus removed, I had leisure to attend to the purchase of our provisions and stores, which was completed on the 26th; and the day following, the whole stock was sent on board.

As Canton was likely to be the most advantageous market for furs, I was desired by Captain Gore to carry with me about twenty sea-otters skins, chiefly the property of our deceased Commanders, and to dispose of them at the best price I could procure; a commission, which gave me an opportunity of becoming a little acquainted with the genius of the Chinese for trade. Having acquainted some of the English supercargoes with these circumstances, I desired

1779.
December.


them to recommend me to some Chinese merchant of credit and reputation, who would at once offer me a fair and reasonable price. I was accordingly directed to a member of the *Hong*, a society of the principal merchants of the place, who being fully informed of the nature of the business, appeared sensible of the delicacy of my situation; assured me, I might depend on his integrity; and that, in a case of this sort, he should consider himself merely as an agent, without looking for any profit to himself. Having laid my goods before him, he examined them with great care, over and over again, and at last told me, that he could not venture to offer more than three hundred dollars for them. As I knew from the price our skins had sold for in Kamtschatka, that he had not offered me one half their value, I found myself under the necessity of driving a bargain. In my turn, I therefore demanded one thousand; my Chinese then advanced to five hundred; then offered me a private present of tea and porcelain, amounting to one hundred more; then the same sum in money; and, lastly, rose to seven hundred dollars, on which I fell to nine hundred. Here, each side declaring he would not recede, we parted; but the Chinese soon returned with a list of India goods, which he now proposed I should take in exchange, and which, I was afterward told, would have amounted in value, if honestly delivered, to double the sum he had before offered. Finding I did not choose to deal in this mode, he proposed as his *ultimatum*, that we should divide the difference, which, being tired of the contest, I consented to, and received the eight hundred dollars.

The ill health, which at this time I laboured under, left me little reason to lament the very narrow limits, within which the policy of the Chinese obliges every European at Canton

1779.
December.

Canton to confine his curiosity. I should otherwise have felt exceedingly tantalized with living under the walls of so great a city, full of objects of novelty, without being able to enter it. The account given of this place by *Peres le Comte* and *Du Halde*, are in every one's hand. The authors have lately been accused of great exaggeration by *M. Sonnerat*; for which reason the following observations, collected from the information with which I have been obligingly furnished by several English gentlemen, who were a long time resident at Canton, may not be unacceptable to the Public.

Canton, including the old and new town, and the suburbs, is about ten miles in circuit. With respect to its population, if one may judge of the whole, from what is seen in the suburbs, I should conceive it to fall considerably short of an European town of the same magnitude. *Le Comte* estimated the number of inhabitants at one million five hundred thousand; *Du Halde* at one million; and *M. Sonnerat* says he has ascertained them to be no more than seventy-five thousand *: but, as this gentleman has not favoured us with the grounds on which his calculation was founded; and, besides, appears as desirous of depreciating every thing that relates to the Chinese, as the Jesuits may be of magnifying, his opinion certainly admits of some doubt. The following circumstances may perhaps lead the reader to form a judgment with tolerable accuracy on this subject.

* J'ai vérifié moi-même, avec plusieurs Chinois, la population de Canton, de la ville de Tartare, & de celle de Battaux, &c. *Voyage aux Indes, &c.* Par *M. Sonnerat*, Tom. II. p. 14.

1779.
December.

A Chinese house, undoubtedly, occupies more space than is usually taken up by houses in Europe: but the proportion suggested by M. Sonnerat, of four or five to one, certainly goes much beyond the truth. To this should be added, that a great many houses, in the suburbs of Canton, are occupied, for commercial purposes only, by merchants and rich tradesmen, whose families live intirely within the city. On the other hand, a Chinese family appears to consist, on an average, of more persons than an European. A *Mandarine*, according to his rank and substance, has from five to twenty wives. A merchant, from three to five. One of this class at Canton, had, indeed, twenty-five wives, and thirty-six children; but this was mentioned to me as a very extraordinary instance. An opulent tradesman has usually two; and the lower class of people very rarely more than one. Their servants are at least double in number to those employed by persons of the same condition in Europe. If, then, we suppose a Chinese family one-third larger, and an European house two-thirds less, than each other, a Chinese city will contain only half the number of inhabitants contained in a European town of the same size. According to these *data*, the city and suburbs of Canton may probably contain about one hundred and fifty thousand.

With respect to the number of inhabited *Sampanes*, I found different opinions were entertained; but none placing them lower than forty thousand. They are moored in rows close to each other, with a narrow passage, at intervals, for the boats to pass up and down the river. As the Tygris, at Canton, is somewhat wider than the Thames, at London; and the whole river is covered in this manner for the extent of at least a mile; this account of their number does not appear to me, in the least, exaggerated; and if it be allowed,

1779-
December.

the number of inhabitants in the Sampanes alone (for each of them contains one family), must amount to nearly three times the number supposed by M. Sonnerat to be in the whole city.

The military force of the province, of which Canton is the capital, amounts to fifty thousand men. It is said that twenty thousand are stationed in and about the city; and, as a proof of this, I was assured, that, on the occasion of some disturbance that had happened at Canton, thirty thousand men were drawn together within the space of a few hours.

The streets are long, and most of them narrow and irregular; but well paved with large stones; and, for the most part, kept exceedingly clean. The houses are built of brick, one story high, having generally two or three courts backward, in which are the ware-houses for merchandize, and, in the houses within the city, the apartments for the women. A very few of the meanest sort are built of wood.

The houses belonging to the European factors, are built on an handsome quay, with a regular façade of two stories toward the river, and disposed, within, partly after the European, and partly after the Chinese manner. Adjoining to these are a number of houses, belonging to the Chinese, and hired out to the commanders of ships, and merchants, who make an occasional stay. As no European is allowed to bring his wife to Canton, the English supercargoes live together, at a common table, which is kept by the company, and have each a separate apartment, consisting of three or four rooms. The time of their residence seldom exceeds eight months annually; and as they are pretty constantly employed, during that time, in the service of the
company,

1779.
December.

company, they may submit, with the less regret, to the restraints they are kept under. They very rarely pay any visits within the walls of Canton, except on public occasions. Indeed, nothing gave me so unfavourable an idea of the character of the Chinese, as to find, that amongst so many persons of liberal minds, and amiable manners, some of whom have resided in that country for near fifteen years together, they have never formed any friendship or social connection. As soon as the last ship quits Wampu, they are all obliged to retire to Macao; but, as a proof of the excellent police of the country, they leave all the money they possess in *specie* behind them, which, I was told, sometimes amounted to one hundred thousand pounds sterling, and for which they had no other security than the seals of the merchants of the *Hong*, the viceroy, and *Mandarines*.

During my stay at Canton, I was carried, by one of the English gentlemen, to visit a person of the first consequence in the place. We were received in a long room or gallery, at the upper end of which stood a table, with a large chair behind it, and a row of chairs extending from it on each side down the room. Being previously instructed, that the point of civility consisted in remaining as long unseated as possible, I readily acquitted myself of this piece of *etiquette*; after which we were entertained with tea, and some preserved and fresh fruits. Our host was very fat, with a heavy dull countenance, and of great gravity in his deportment. He spoke a little broken English and Portuguese; and, after we had taken our refreshment, he carried us about his house and garden; and having shewed us all the improvements he was making, we took our leave.

1779.
December.

Having procured an account of the price of provisions at Canton, as settled for the year 1780, which the reader will find at the end of this Chapter, I have only to observe, that the different articles are supposed to be the best of the kind; and that the natives purchase the same for nearly one-third less than the price, which in the list is fixed only for strangers.

I had hitherto intended, as well to avoid the trouble and delay of applying for passports, as to save the unnecessary expence of hiring a *Sampane*, which I understood amounted at least to twelve pounds sterling, to go along with the stores to Macao, in the country merchant's ship I have before mentioned: but having received an invitation from two English gentlemen, who had obtained passports for four, I accepted, along with Mr. Philips, their offer of places in a Chinese boat, and left Mr. Lannyon to take care of the men and stores, which were to sail the next day. In the evening of the 26th, I took my leave of the supercargoes, having thanked them for their many obliging favours; amongst which I must not forget to mention an handsome present of tea, for the use of the ships companies, and a large collection of English periodical publications. The latter we found a valuable acquisition, as they both served to amuse our impatience, during our tedious voyage home, and enabled us to return not total strangers to what had been transacting in our native country. At one o'clock, the next morning, we left Canton, and arrived at Macao, about the same hour the day following, having passed down a channel, which lies to the Westward of that by which we had come up.

Sunday 26.

Monday 27.

Tuesday 28.

During

1779.
December.

During our absence, a brisk trade had been carrying on with the Chinese, for the sea-otter skins, which had, every day, been rising in their value. One of our seamen sold his stock, alone, for eight hundred dollars; and a few prime skins, which were clean, and had been well preserved, were sold for one hundred and twenty each. The whole amount of the value, in *specie* and goods, that was got for the furs, in both ships, I am confident, did not fall short of two thousand pounds sterling; and it was generally supposed, that at least two-thirds of the quantity we had originally got from the Americans, were spoiled and worn out, or had been given away, and otherwise disposed of, in Kamtschatka. When, in addition to these facts, it is remembered, that the furs were, at first, collected without our having any idea of their real value; that the greatest part had been worn by the Indians, from whom we purchased them; that they were afterward preserved with little care, and frequently used for bed-clothes, and other purposes, during our cruize to the North; and that, probably, we had never got the full value for them in China; the advantages that might be derived from a voyage to that part of the American coast, undertaken with commercial views, appear to me of a degree of importance sufficient to call for the attention of the Public.

The rage with which our seamen were possessed to return to Cook's River, and, by another cargo of skins, to make their fortunes, at one time, was not far short of mutiny; and I must own, I could not help indulging myself in a project, which the disappointment we had suffered, in being obliged to leave the Japanese Archipelago, and the Northern coast of China unexplored, first suggested; and, by what I conceived, that object might still be happily accomplished,

through

1779.
December.

through means of the East-India Company, not only without expence, but even with the prospect of very considerable advantages. Though the situation of affairs at home, or perhaps greater difficulties in the execution of my scheme than I had foreseen, have hitherto prevented its being carried into effect, yet, as I find the plan in my journal, and still retain my partiality for it, I hope it will not be intirely foreign to the nature of this work, if I beg leave to insert it here.

I proposed then, that the Company's China ships should carry an additional complement of men each, making in all one hundred. Two vessels, one of two hundred and the other of one hundred and fifty tons, might, I was told, with proper notice, be readily purchased at Canton; and, as victualling is not dearer there than in Europe, I calculate, that they might be completely fitted out for sea, with a year's pay and provision, for six thousand pounds, including the purchase. The expence of the necessary articles for barter is scarcely worth mentioning. I would, by all means, recommend, that each ship should have five ton of unwrought iron, a forge, and an expert smith, with a journeyman and apprentice, who might be ready to forge such tools, as it should appear the Indians were most desirous of. For though six of the finest skins purchased by us, were got for a dozen large green glass beads, yet it is well known, that the fancy of these people for articles of ornament, is exceedingly capricious; and that iron is the only sure commodity for their market. To this might be added, a few gross of large pointed case-knives, some bales of coarse woollen cloth (linen they would not accept of from us), and a barrel or two of copper and glass trinkets.

I have

I have here proposed two ships, not only for the greater security of the expedition, but because I think single ships ought never to be sent out on discoveries. For where risks are to be run, and doubtful and hazardous experiments tried, it cannot be expected that single ships should venture so far, as where there is some security provided against an untoward accident.

1779.
December.

The vessels being now ready for sea, will sail with the first South Westerly monsoon, which generally sets in about the beginning of April. With this wind they will steer to the Northward, along the coast of China, beginning a more accurate survey from the mouth of the river Kyana, or the Nankin River, in latitude 30° , which I believe is the utmost limit of this coast hitherto visited by European ships. As the extent of that deep gulf called Whang Hay, or the Yellow Sea, is at present unknown, it must be left to the discretion of the Commander, to proceed up it as far as he may judge prudent; but he must be cautious not to entangle himself too far in it, lest he should want time for the prosecution of the remaining part of his enterprize. The same discretion must be used, when he arrives in the Straits of Tessoï, with respect to the islands of Jesso, which, if the wind and weather be favourable, he will not lose the opportunity of exploring.

Having proceeded to the latitude of $51^{\circ} 40'$, where he will make the Southernmost point of the island of Sagaleen, beyond which the sea of Okotsk is sufficiently known, he will steer to the Southward, probably in the beginning of June, and endeavour to fall in with the Southernmost of the Kurile islands. Ouroop or Nadeschda, according to the accounts of the Russians, will furnish the ships with a good harbour,

1779.
December.

harbour, where they may wood and water, and take in such other refreshments as the place may afford. Toward the end of June, they will shape their course for the Shummagins, and from thence to Cook's River, purchasing, as they proceed, as many skins as they are able, without losing too much time, since they ought to steer again to the Southward, and trace the coast with great accuracy from the latitude of 56° to 50° , the space from which we were driven out of sight of land by contrary winds. It should here be remarked, that I consider the purchase of skins, in this expedition, merely as a secondary object, for defraying the expence; and it cannot be doubted, from our experience in the present voyage, that two hundred and fifty skins, worth one hundred dollars each, may be procured without any loss of time; especially as it is probable they will be met with along the coast to the Southward of Cook's River.

Having spent three months on the coast of America, they will set out on their return to China early in the month of October, avoiding in their route, as much as possible, the tracks of former navigators. I have now only to add, that if the fur trade should become a fixed object of Indian commerce, frequent opportunities will occur of completing whatever may be left unfinished, in the voyage of which I have here ventured to delineate the outlines.

The barter which had been carrying on with the Chinese for our sea-otter skins, had produced a very whimsical change in the dress of all our crew. On our arrival in the Typa, nothing could exceed the ragged appearance both of the younger officers and seamen; for, as our voyage had already exceeded, by near a twelvemonth, the time it was at first imagined we should remain at sea, almost the whole
of

of our original stock of European clothes had been long worn out, or patched up with skins, and the various manufactures we had met with in the course of our discoveries. These were now again mixed and eked out with the gaudiest silks and cottons of China.

1779.
December.

On the 30th, Mr. Lannyon arrived with the stores and provisions, which were immediately stowed in due proportion on board the two ships. The next day, agreeably to a bargain made by Captain Gore, I sent our sheet anchor to the country ship, and received in return the guns, which she before rode by. Friday 30.

Whilst we lay in the Typa, I was shewn, in a garden belonging to an English gentleman at Macao, the rock, under which, as the tradition there goes, the poet Camoens used to sit and compose his *Lusiad*. It is a lofty arch, of one solid stone, and forms the entrance of a grotto dug out of the rising ground behind it. The rock is overshadowed by large spreading trees, and commands an extensive and magnificent view of the sea, and the interspersed islands.

On the 11th of January, two seamen belonging to the *Resolution* found means to run off with a six-oared cutter, and notwithstanding diligent search was made, both that and the following day, we were never able to learn any tidings of her. It was supposed, that these people had been seduced by the prevailing notion of making a fortune, by returning to the fur islands. 1780.
January.
Wednesd. 11.

As we heard nothing, during our stay in the Typa, of the measurement of the ships, it may be concluded, that the point so strongly contested by the Chinese, in Lord Anson's time, has, in consequence of his firmness and resolution, never since been insisted on.

1780.
January.

The following nautical observations were made while we lay here :

Harbour of Macao,	-	Lat. 22° 12' 0" North.
		Long. 113° 47' 0" East.
Anchoring-place in the Typa.	Lat. 22° 9' 20" North.	
	Long. 113° 48' 34" East.	
Mean dip of the North pole of the magnetic needle	-	} 21° 1' 0"
Variation of the compass	- -	0° 19' 0" West.

On the full and change days it was high water in the Typa at 5^h 15^m, and in Macao harbour at 5^h 50^m. The greatest rise was six feet one inch. The flood appeared to come from the South Eastward; but we could not determine this point with certainty, on account of the great number of islands which lie off the mouth of the river of Canton.

Prices of Provisions at Canton, 1780.

				£.	s.	d.	
Ananas	-	-	-	0	4	0	a score.
Arrack	-	-	-	0	0	8	per bottle.
Butter	-	-	-	0	2	4 ¹ / ₃	per catty *.
Beef, Canton	-	-	-	0	0	2 ³ / ₄	
Ditto, Macao	-	-	-	0	0	5 ¹ / ₃	
Birds-nests	-	-	-	3	6	8	
Biscuit	-	-	-	0	0	4	
Beache de Mar	-	-	-	0	2	0 ⁴ / ₃	
Calf	-	-	-	1	6	9 ³ / ₅	each.
Caravances, dried	-	-	-	0	0	2 ³ / ₅	per catty.

* A catty is 18 oz.—a pecul 100 catty.

Cabbage,

THE PACIFIC OCEAN.

443

				£.	s.	d.		1780. January.
Cabbage, Nankeen	-	-	-	0	0	4 $\frac{4}{5}$	per catty.	
Curry stuff	-	-	-	0	1	4		
Coffee	-	-	-	0	1	4		
Cocoa-nuts	-	-	-	0	0	4	each.	
Charcoal	-	-	-	0	3	4	per pecul.	
Coxice	-	-	-	0	1	4	per catty.	
Canton nuts	-	-	-	0	0	4		
Chefnuts	-	-	-	0	0	2 $\frac{2}{5}$		
Cockles	-	-	-	0	0	3 $\frac{1}{5}$		
Ducks	-	-	-	0	0	5 $\frac{1}{5}$		
Ditto, wild	-	-	-	0	1	0 $\frac{4}{5}$	each.	
Deers finews	-	-	-	0	2	1 $\frac{2}{5}$	per catty.	
Eels	-	-	-	0	0	6 $\frac{2}{5}$		
Eggs	-	-	-	0	2	0	per hundred.	
Fish, common	-	-	-	0	0	3 $\frac{1}{5}$	per catty.	
Ditto, best	-	-	-	0	0	6 $\frac{2}{5}$		
Ditto salted, Nankeen,	-	-	-	0	0	9 $\frac{2}{5}$		
Fruit	-	-	-	0	0	1 $\frac{2}{5}$		
Ditto, Nankeen	-	-	-	0	2	0		
Frogs	-	-	-	0	0	6 $\frac{2}{5}$		
Flour	-	-	-	0	0	1 $\frac{7}{10}$		
Fowls, capons, &c.	-	-	-	0	0	7 $\frac{1}{5}$		
Fish maws	-	-	-	0	2	1 $\frac{3}{5}$		
Geese	-	-	-	0	0	6 $\frac{2}{5}$		
Greens	-	-	-	0	0	1 $\frac{3}{4}$		
Grass	-	-	-	0	0	2 $\frac{2}{5}$	per bundle.	
Grapes	-	-	-	0	1	0 $\frac{4}{5}$	per catty.	
Ham	-	-	-	0	1	2 $\frac{2}{5}$		
Hartshorn	-	-	-	0	1	4		
Hogflard	-	-	-	0	0	7 $\frac{1}{5}$		
Hog, alive	-	-	-	0	0	4 $\frac{2}{5}$		

3 L 2

Kid

1780.
January.

				£.	s.	d.	
Kid, alive	-	-	-	0	0	4 $\frac{3}{4}$	per catty.
Limes	-	-	-	0	0	0 $\frac{4}{5}$	
Litchis, dried	-	-	-	0	0	2 $\frac{2}{5}$	
Lockfoyl	-	-	-	0	0	6 $\frac{2}{5}$	
Lobchocks	-	-	-	0	0	5 $\frac{3}{5}$	
Lamp oil	-	-	-	0	0	5 $\frac{3}{5}$	
Lamp wick	-	-	-	0	0	8	
Melons	-	-	-	0	0	4 $\frac{4}{5}$	each.
Milk	-	-	-	0	0	1 $\frac{1}{4}$	per catty.
Ditto, Macao	-	-	-	0	0	3 $\frac{1}{5}$	
Mustard seed	-	-	-	0	0	6 $\frac{1}{5}$	
Mushrooms, pickled	-	-	-	0	1	8	
Ditto, fresh	-	-	-	0	1	4	
Oysters	-	-	-	0	3	4	per pecul.
Onions, dried	-	-	-	0	0	2 $\frac{2}{5}$	per catty.
Pork	-	-	-	0	0	7 $\frac{1}{7}$	
Pig	-	-	-	0	0	5 $\frac{3}{5}$	
Paddy	-	-	-	0	0	0 $\frac{4}{5}$	
Pepper	-	-	-	0	1	0 $\frac{1}{5}$	
Pheasants	-	-	-	0	5	4	each.
Partridges	-	-	-	0	0	9 $\frac{3}{5}$	
Pigeons	-	-	-	0	0	5 $\frac{1}{5}$	
Pomegranates	-	-	-	0	0	2 $\frac{2}{5}$	
Quails	-	-	-	0	0	1 $\frac{3}{5}$	
Rabbits	-	-	-	0	1	4	
Rice	-	-	-	0	0	2	per catty.
Ditto, red	-	-	-	0	0	2 $\frac{2}{5}$	
Ditto, coarse	-	-	-	0	0	1 $\frac{1}{5}$	
Ditto, Japan	-	-	-	0	0	8	
Raisins	-	-	-	0	2	0	
Sheep	-	-	-	3	6	8	each.

Snipes

THE PACIFIC OCEAN.

445

				£.	s.	d.	
Snipes	-	-	-	0	0	1 $\frac{1}{2}$	per catty.
Sturgeon	-	-	-	0	4	9 $\frac{3}{5}$	
Ditto, small	-	-	-	0	2	4 $\frac{4}{5}$	
Sugar	-	-	-	0	0	3 $\frac{1}{5}$	
Salt	-	-	-	0	0	1 $\frac{3}{5}$	
Saltpetre	-	-	-	0	2	1 $\frac{3}{5}$	
Soy	-	-	-	0	0	1 $\frac{3}{5}$	
Spices	-	-	-	0	16	8	
Sweet-meats	-	-	-	0	0	6 $\frac{2}{5}$	
Sago	-	-	-	0	0	3 $\frac{1}{5}$	
Sallad	-	-	-	0	0	2 $\frac{2}{5}$	
Sharks fins	-	-	-	0	2	1 $\frac{3}{5}$	
Samfui foy	-	-	-	0	0	2 $\frac{2}{5}$	
Teal	-	-	-	0	0	6 $\frac{1}{5}$	each.
Turtle	-	-	-	0	0	9 $\frac{3}{5}$	per catty.
Tea	-	-	-	0	2	0	
Turmerick	-	-	-	0	0	2 $\frac{2}{5}$	
Tamarinds	-	-	-	0	0	8	
Vinegar	-	-	-	0	0	1 $\frac{3}{5}$	
Vermicelli	-	-	-	0	0	3 $\frac{1}{5}$	
Wax candles	-	-	-	0	3	0	
Walnuts	-	-	-	0	0	4 $\frac{4}{5}$	
Wood	-	-	-	0	1	4	per pecul.
Water	-	-	-	0	6	8	per 100 B'.

1780.
January.

				£.	s.	d.	
Rent of Poho Factory	400	0	0				per annum.
— of Lunfoon	316	13	4				
Servants rice	-	0	8	0			per month.
Ditto, wages	-	0	19	2 $\frac{2}{5}$			per month for refiants.

Servants.

1780.
January.

		Doll.	
Servants wages for	}	20	
the season	- }		
Stewards wages	-	80	<i>per annum.</i>
Butlers ditto	-	80	

Prices of Labour.

	£.	s.	d.	
A coolee, or porter	-	0	0	8 <i>per day.</i>
A taylor	-	0	0	5 <i>and rice.</i>
A handicraftsman	-	0	0	8
A common labourer,				from 3 <i>d.</i> to 5 <i>d.</i>
A woman's labour				considerably cheaper.

C H A P. X.

Leave the Typa.—Orders of the Court of France respecting Captain Cook.—Resolutions in consequence thereof.—Strike Soundings on the Macclesfield Banks.—Pass Pulo Sapata.—Steer for Pulo Condore.—Anchor at Pulo Condore.—Transactions during our Stay.—Journey to the principal Town.—Receive a Visit from a Mandarin.—Examine his Letters.—Refreshments to be procured. Description, and present State of the Island.—Its Produce.—An Assertion of M. Sonnerat refuted.—Astronomical and Nautical Observations.

ON the 12th of January, 1780, at noon, we unmoored, and scaled the guns, which, on board my ship, now amounted to ten; so that, by means of four additional ports, we could, if occasion required, fight seven on a side. In like manner, the Resolution had increased the number of her guns from twelve to sixteen; and, in both ships, a stout barricade was carried round their upper works, and every other precaution taken to give our small force as respectable an appearance as possible.

1780.
January.
Thursday 12.

We thought it our duty to provide ourselves with these means of defence, though we had some reason to believe, that the generosity of our enemies had, in a great measure, rendered them superfluous. We were informed at Canton, that

1780.
January.

that the public prints, which had arrived last from England, made mention of instructions having been found on board all the French ships of war, captured in Europe, directing their commanders, in case of falling in with the ships that sailed under the command of Captain Cook, to suffer them to proceed on their voyage without molestation. The same orders were also said to have been given by the American congress to the vessels employed in their service. As this intelligence was farther confirmed by the private letters of several of the supercargoes, Captain Gore thought himself bound, in return for the liberal exceptions made in our favour, to refrain from availing himself of any opportunities of capture, which these might afford, and to preserve, throughout his voyage, the strictest neutrality.

Friday 13.

At two in the afternoon, having got under sail, the Resolution saluted the fort of Macao with eleven guns, which was returned with the same number. At five, the wind dropping, the ship missed stays, and drove into shallow water; but, by carrying out an anchor, she was hauled off without receiving the smallest damage. The weather continuing calm, we were obliged to warp out into the entrance of the Typa, which we gained by eight o'clock, and lay there till nine the next morning; when, by the help of a fresh breeze from the East, we stood to the Southward between Potoe and Wungboo.

Sunday 15.

At noon, we were saluted by a Swedish ship as she passed us on her way to Europe. At four the Ladrone bore East, distant two leagues. We now steered South half East, with a fresh breeze from the East North East, without any occurrence worth remarking, till noon of the 15th; when, being

in latitude $18^{\circ} 57'$, and longitude $114^{\circ} 13'$, the wind veering to the North, we directed our course half a point more to the Eastward, in order to strike soundings over the Macclesfield Bank. This we effected at eight in the evening of the 16th, and found the depth of water to be fifty fathoms, over a bottom of white sand and shells. This part of the Macclesfield Shoals we placed in latitude $15^{\circ} 51'$, and longitude $114^{\circ} 20'$; which agrees very exactly with the position given in Mr. Dalrymple's map, whose general accuracy, if it stood in need of any support, was confirmed, in this instance, by a great number of lunar observations, which we had an opportunity of making every day since we left the Typa. The variation was found to be, in the forenoon, $0^{\circ} 39'$ West.

1780.
January.

Monday 16.

On the 17th, we had heavy gales from the East by North, with a rough tumbling sea, and the weather overcast and boisterous. On the 18th, the wind still continued to blow strong, and the sea to run high, we altered our course to South West by South; and, at noon, being in latitude $12^{\circ} 34'$, longitude 132° , we began to steer a point more to the Westward for Pulo Sapata, which we saw on the 19th, at four in the afternoon, bearing North West by West, about four leagues distant. This small, high, barren island is called *Sapata*, from its resemblance of a shoe. Our observations, compared with Mr. Bayly's time-keeper, place it in latitude $10^{\circ} 4'$ North, longitude $109^{\circ} 10'$ East. The gale had, at this time, increased with such violence, and the sea ran so high, as to oblige us to close-reef the topsails. During the last three days, the ships had outrun their reckoning at the rate of twenty miles a day; and, as we could not attribute the whole of this to the effects of a following sea, we imputed

Tuesday 17.

Wednes. 18.

Thursday 19.

1780.
January.

it in part to a current, which, according to my own calculations, had set forty-two miles to the South South West, between the noon of the 19th, and the noon of the 20th; and is taken into the account in determining the situation of the island.

Friday 20.

After passing Sapata, we steered to the Westward; and at midnight sounded, and had ground with fifty fathoms of line, over a fine sandy bottom. In the morning of the 20th, the wind becoming more moderate, we let out the reefs, and steered West by South for Pulo Condore. At noon the latitude was $8^{\circ} 46'$ North, longitude $106^{\circ} 45'$ East; and at half past twelve we got sight of the island, bearing West. At four, the extremes of Pulo Condore, and the islands that lie off it, bore South East and South West by West; our distance from the nearest islands being two miles. We kept to the North of the islands, and stood for the harbour on the South West end of Condore, which, having its entrance from the North West, is the best sheltered during the North East monsoon. At six, we anchored, with the best bower, in six fathoms, veered away two thirds of the cable, and kept the ship steady with a stream anchor and cable to the South East. When moored, the extremes of the entrance of the harbour bore North by West, and West North West one quarter West; the opening at the upper end South East by East three quarters East; our distance from the nearest shore a quarter of a mile.

Saturday 21.

As soon as we were come to anchor, Captain Gore fired a gun, with a view of apprising the natives of our arrival, and drawing them toward the shore, but without effect. Early in the morning of the 21st, parties were sent to cut wood, which was Captain Gore's principal motive for

coming hither. In the afternoon, a sudden gust of wind broke the stream-cable, by which the *Discovery* was riding, and obliged us to moor with the bower anchors.

1780.
January.

None of the natives having yet made their appearance, notwithstanding a second gun had been fired, Captain Gore thought it advisable to land, and go in search of them, that no time might be lost in opening a trade for such provisions as the place could afford: with this view, he appointed me to accompany him, in the morning of the 22d; and, as the wind at this time blew strong from the East, we did not think it prudent to coast in our boats to the town, which is situated in the East side of the island, but rowed round the North point of the harbour. We had proceeded about two miles along the shore, when observing a road that led into a wood, we landed. Here I quitted Captain Gore, taking with me a Midshipman, and four armed sailors, and pursued the path, which seemed to point directly across the island. We proceeded through a thick wood, up a steep hill, to the distance of a mile, when, after descending through a wood of the same extent, on the other side, we came out into a flat, open, sandy country, interspersed with cultivated spots of rice and tobacco, and groves of cabbage palm-trees, and cocoa-nut-trees. We here spied two huts, situated on the edge of the wood, to which we directed our course; and before we came up to them, were descried by two men, who immediately ran away from us, notwithstanding all the peaceable and supplicating gestures we could devise.

Sunday 22.

On reaching the huts, I ordered the party to stay without, lest the sight of so many armed men should terrify the inhabitants, whilst I entered and reconnoitred alone. I found,

1780.
January.

in one of the huts an elderly man, who was in a great fright, and preparing to make off with the most valuable of his effects that he could carry. However, I was fortunate enough, in a very little time, so intirely to dispel his fears, that he came out, and called to the two men who were running away to return. The old man and I now soon came to a perfect understanding. A few signs, particularly that most significant one of holding out a handful of dollars, and then pointing to a herd of buffaloes, and the fowls that were running about the huts in great numbers, left him without any doubts as to the real objects of our visit. He pointed toward a place where the town stood, and made us comprehend, that by going thither, all our wants would be supplied. By this time the young men, who had fled, were returned, and the old man ordered one of them to conduct us to the town, as soon as an obstacle should be removed, of which we were not aware. On our first coming out of the wood, a herd of buffaloes, to the number of twenty at least, came running toward us, tossing up their heads, snuffing the air, and roaring in a hideous manner. They had followed us to the huts, and stood drawn up in a body, at a little distance; and the old man made us understand, that it would be exceedingly dangerous for us to move, till they were driven into the woods; but so enraged were the animals grown at the sight of us, that this was not effected without a good deal of time and difficulty. The men, not being able to accomplish it, we were surprized to see them call to their assistance a few little boys, who soon drove them out of sight. Afterward, we had occasion to observe, that in driving these animals, and securing them, which is done by putting a rope through a hole which is made in their nostrils, little boys were always employed,

employed, who could stroke and handle them with impunity, at times when the men durst not approach them. Having got rid of the buffaloes, we were conducted to the town, which was at a mile's distance; the road to it lying through a deep white sand. It is situated near the sea-side; at the bottom of a retired bay, which must afford a safe roadstead during the prevalence of the South West monsoons.

1780.
January.

This town consists of between twenty and thirty houses, built close together; besides six or seven others that are scattered about the beach. The roof, the two ends, and the side fronting the country, are neatly constructed of reeds; the opposite side, facing the sea, is intirely open; but, by means of a sort of bamboo screens, they can exclude or let in as much of the sun and air as they please. We observed, likewise, other large screens or partitions, for the purpose of dividing, as occasion required, the single room of which the house, properly speaking, consists, into separate apartments.

We were conducted to the largest house in the town, belonging to their Chief, or, as they called him, their Captain. This house had a room at each end, separated by a partition of reeds from the middle space, which was open on both sides, and provided with partition screens like the others. It had, besides, a penthouse, projecting four or five feet beyond the roof, and running the whole length on each side. At each end of the middle room were hung some Chinese paintings, representing men and women in ludicrous attitudes. In this apartment we were civilly desired to seat ourselves on mats, and *betel* was presented to us.

1780.
January.

By means of my money, and pointing at different objects in sight, I had no difficulty in making a man, who seemed to be the principal person of the company, comprehend the main business of our errand; and I as readily understood from him, that the Chief, or Captain, was absent, but would soon return; and that, without his consent, no purchases of any kind could be made. We availed ourselves of the opportunity which this circumstance afforded us, to walk about the town; and did not forget to search, though in vain, for the remains of a fort, which had been built by our countrymen near the spot we were now upon, in 1702 *.

On returning to the Captain's house, we were sorry to find that he was not yet arrived; and the more so, as the time was almost elapsed which Captain Gore had fixed for our return to the boat. The natives were desirous we should lengthen our stay; they even proposed our passing the night there, and offered to accommodate us in the best manner in their power. I had observed, when we were in the house before, and now remarked it the more, that the man I have mentioned above, frequently retired into one of the end rooms, and staid there some little time, before he answered the questions that were put to him; which led me to suspect that the Captain was all the time there,

* The English settled here in the year 1702, when the factory of Chusan, on the coast of China, was broken up, and brought with them some Macassar soldiers, who were hired to assist in building a fort; but the president not fulfilling his engagement with them, they watched an opportunity, and one night murdered all the English in the fort. Those without the fort, hearing a noise, took the alarm, and ran to their boats, very narrowly escaping with their lives, but not without much fatigue, hunger, and thirst, to the Johore dominions, where they were treated with great humanity. Some of these afterward went to form a settlement at Benjar-Massean, on the island of Borneo. *East India Directory*, p. 86.

though,

though, for reasons best known to himself, he did not choose to appear; and I was confirmed in this opinion, by being stopped as I was attempting to go into the room. At length, it clearly appeared that my suspicions were well founded; for, on our preparing to depart, the person who had so often passed in and out, came from the room with a paper in his hand, and gave it to me to read; and I was not a little surprized to find it a sort of a certificate in French, as follows:

1780.
January.

PIERRE JOSEPH GEORGE, Evêque d'Adran, Vicaire Apost.
de Cochinchina, &c. &c.

Le petit *Mandarin*, porteur de cet écrit, est véritablement Envoyé de la cour à Pulo Condore, pour y attendre et recevoir tout vaisseau Européen qui auroit sa destination d'approcher ici. Le Capitaine, en conséquence, pourroit se fier ou pour conduire le vaisseau au port, ou pour faire passer les nouvelles qu'il pourroit croire nécessaire.

A SAI-GON,
10 d'Août 1779.

PIERRE JOSEPH GEORGE,
Evêque d'Adran.

We returned the paper, with many protestations of our being the *Mandarin's* good friends, begging he might be informed that we hoped he would do us the favour to visit the ships, that we might convince him of it. We now took our leave, well satisfied, on the whole, with what had passed, but full of conjectures about this extraordinary French paper. Three of the natives offered their services to accompany us back, which we readily accepted, and returned by the way we came. Captain Gore felt peculiar satisfaction at seeing us; for, as we had exceeded our time near an hour, he began to be alarmed for our safety, and

was

1780.
January.

was preparing to march after us. He and his party had, during our absence, been profitably employed, in loading the boat with the cabbage-palm, which abounds in this bay. Our guides were made exceedingly happy, on our presenting them with a dollar each for their trouble, and intrusting to their care a bottle of rum for the *Mandarin*. One of them chose to accompany us on board.

At two in the afternoon we joined the ships, and several of our shooting parties returned about the same time from the woods, having had little success, though they saw a great variety of birds and animals, some of which will be hereafter noticed.

At five, a *proa*, with six men, rowed up to the ship, from the upper end of the harbour, and a decent looking personage introduced himself to Captain Gore with an ease and good breeding, which convinced us his time had been spent in other company than what this island afforded. He brought with him the French paper above transcribed, and said he was the *Mandarin* mentioned in it. He spoke a few Portuguese words, but as none of us were acquainted with this language, we were obliged to have recourse to a black man on board, who could speak the Malay, which is the general language of these islanders, and was understood by the *Mandarin*. After a little previous conversation, he declared to us, that he was a Christian, and had been baptized by the name of Luco; that he had been sent hither in August last, from Sai-gon, the capital of Cochin China, and had since waited in expectation of some French ships, which he was to pilot to a safe port, not more than a day's sail hence, upon the coast of Cochin China. We acquainted him, that we were not French, but English, and asked him, whether

1780.
January.

whether he did not know, that these two nations were now at war with one another. He made answer in the affirmative; but, at the same time, signified to us, that it was indifferent to him to what nation the ships he was instructed to wait for belonged, provided their object was to trade with the people of Cochin China. He here produced another paper, which he desired us to read. This was a letter sealed, and directed "To the Captains of any European vessels that may touch at Condore." Although we apprehended that this letter was designed for French ships in particular, yet as the direction included all European Captains, and as Luco was desirous of our perusing it, we broke the seal, and found it to be written by the Bishop who wrote the certificate. Its contents were as follows: "That having reason to expect, by some late intelligence from Europe, that a vessel would soon come to Cochin China, he had, in consequence of this news, got the Court to send a *Mandarin* (the bearer) to Pulo Condore, to wait its arrival; that if the vessel should put in there, the Commander might either send by the bearer an account to him of his arrival, or trust himself to the *Mandarin*, who would pilot him into a well-sheltered port in Cochin China, not more than a day's sail from Condore; that should he choose to remain in Condore, till the return of the messenger, proper interpreters would be sent back, and any other assistance, which a letter should point out, be furnished; that it was unnecessary to be more particular, of which the Captain himself must be sensible." This letter had the same date as the certificate, and was returned to Luco again, without any copy being taken.

From this letter, and the whole of Luco's conversation, there remained little doubt, that it was a French ship he was to expect; at the same time we found he would be glad

1780.
January.

not to lose his errand, and had no objection to become our pilot. We could not discover from the *Mandarin*, the exact object and business which the vessel he was waiting for, intended to prosecute in Cochin China. It is true, that our interpreter, the black, was extremely dull and stupid, and I should therefore be sorry, with such imperfect means of information, to run the risk of misleading the reader by any conjectures of my own, respecting the object of Luco's visit to this island. I shall only add, that he told us the French ships might perhaps have put into Tirnon, and from thence sail to Cochin China; and, as he had received no intelligence of them, he thought this most likely to have been the case.

Captain Gore's inquiries were next directed to find out what supplies could be obtained from the island. Luco said, that he had two buffaloes of his own, which were at our service; and that there were plenty on the island, which might be purchased for four or five dollars a head; but finding that Captain Gore thought that sum exceedingly moderate, and would willingly give for them a much greater, the price was afterward raised upon us to seven and eight dollars.

Sunday 23.

Early in the morning of the 23d, the launches of both ships were sent to the town, to fetch the buffaloes which we had given orders to be purchased; but they were obliged to wait, till it was high-water, as they could at no other time get through the opening at the head of the harbour. On their arrival at the village, they found the surf breaking on the beach with such force, that it was with the utmost difficulty each launch brought a buffalo on board in the evening, and the officers, who were sent on this service, gave it as
I their

1780.
January.

their opinion, that between the violence of the surf, and the fierceness of the buffaloes, it would be extremely imprudent to attempt bringing any more off in this way. We had purchased eight, and were now at a loss in what manner to proceed to get them on board. We could kill no more than was just necessary for the consumption of one day, as in this climate meat will not keep till the next. After consulting with Luco, it was concluded, that the remainder should be driven through the wood, and over the hill down to the bay, where Captain Gore and I had landed the day before, which being sheltered from the wind, was more free from surf. This plan was accordingly put in execution; but the untractableness and prodigious strength of the buffaloes, rendered it a tedious and difficult operation. The method of conducting them was, by passing ropes through their nostrils, and round their horns; but having been once enraged at the sight of our men, they became so furious, that they sometimes broke the trees, to which we were often under the necessity of tying them; sometimes they tore asunder the cartilage of the nostril, through which the ropes ran, and got loose. On these occasions, all the exertions of our men, to recover them, would have been ineffectual, without the assistance of some young boys, whom these animals would permit to approach them, and by whose little managements their rage was soon appeased. And when, at length, they were got down to the beach, it was by their aid, in twisting ropes round their legs, in the manner they were directed, that we were enabled to throw them down, and by that means to get them into the boats. A circumstance, respecting these animals, which I thought no less singular than this gentleness toward, and, as it should seem, affection for little children,

1780.
January.

was, that they had not been twenty-four hours on board, before they became the tameſt of all creatures. I kept two of them, a male and female, for a conſiderable time, which became great favourites with the ſailors, and, thinking that a breed of animals of ſuch ſtrength and ſize, ſome of them weighing, when dreſſed, ſeven hundred pounds weight, would be a valuable acquiſition, I was inclined to have brought them with me to England; but my intention was fruſtrated by an incurable hurt that one of them received at ſea.

Friday 28.

It was not till the 28th, that the buffaloes were all got on board; however, there was no reaſon to regret the time taken up by this ſervice, ſince, in the interim, two wells of excellent water had been diſcovered, of which, as alſo of wood, part of the ſhips companies had been employed in laying in a good ſupply; ſo that a ſhorter ſtop would be neceſſary, for replenishing our ſtock of theſe articles, in the Strait of Sunda. A party had likewise been occupied in drawing the ſeine, at the head of the harbour, where they took a great many good fiſh; and another party, in cutting down the cabbage-palm, which was boiled and ſerved out with the meat. Beſides this, having been able to procure only a ſcanty ſupply of cordage at Macao, the repairing of our rigging, was become an object of conſtant attention, and demanded all our ſpare time.

Pulo-Condore is high and mountainous, and ſurrounded by ſeveral ſmaller iſlands, ſome of which are leſs than one, and others two miles diſtant. It takes its name from two Malay words, *Pulo* ſignifying an iſland, and *Condore* a cala-baſh, of which it produces great quantities. It is of the form of a crescent, extending near eight miles from the

1780.
January.

Southernmost point, in a North East direction; but its breadth no where exceeds two miles. From the Westernmost extremity, the land trends to the South East for about four miles; and opposite to this part of the coast there is an island, called, by Monsieur D'Après *, *Little Condore*, which runs two miles in the same direction. This position of the two islands affords a safe and commodious harbour, the entrance into which is from the North West. The distance between the two opposite coasts is three quarters of a mile, exclusive of a border of coral rock, which runs down along each side, extending about one hundred yards from the shore. The anchorage is very good, from eleven to five fathoms water, but the bottom is so soft and clayey, that we found great difficulty in weighing our anchors. Toward the bottom of the harbour there is shallow water for about half a mile, beyond which the two islands approach so near each other, as to leave only a passage at high water for boats. The most convenient place for watering is at a beach on the Eastern side, where there is a small stream which furnished us with fourteen or fifteen tons of water a day.

This island, both with respect to animal and vegetable productions, is considerably improved since the time when Dampier visited it. Neither that writer, nor the compiler of the East India Directory, make mention of any other quadrupeds than hogs, which are said to be very scarce, lizards, and the guanoes; and the latter, on the authority of Monsieur Cedier, a French engineer, who surveyed the island about the year 1720, says, that none of the fruits and esculent plants, so common in the other parts of India,

* Neptune Oriental.

1780.
January.

are to be found here, except water-melons, a few potatoes, small gourds, *chibbols* (a small species of onion), and little black beans. At present, besides the buffaloes, of which we understood there were several large herds, we purchased from the natives some remarkably fine fat hogs, of the Chinese breed. They brought us three or four of a wild fort; and our sportsmen reported, that they frequently met with their tracks in the woods, which also abound with monkees and squirrels, but so shy, that it was difficult to shoot them. One species of the squirrel was of a beautiful shining black colour; and another species striped brown and white. This is called the flying-squirrel, from being provided with a thin membrane, resembling a bat's wing, extending on each side the belly, from the neck to the thighs, which, on stretching out their legs, spreads, and enables them to fly from tree to tree, at a considerable distance. Lizzards were in great abundance; but I do not know that any of us saw the guano, and another animal described by Dampier* as resembling the guano, only much larger.

Amongst its vegetable improvements, I have already mentioned the fields of rice we passed through; and plantains, various kinds of pompions, cocoa-nuts, oranges, shaddocks, and pomegranates, were also met with; though, except the plantains and shaddocks, in no great abundance.

It is probable, from what has been already said, relative to the Bishop of Adran, that the French have introduced these improvements into the island, for the purpose of making it a more convenient refreshing station for any of their ships that may be bound for Cambodia, or Cochin China.

* Vid. Dampier, Vol. i. p. 392.

Should they have made, or intend to make, any settlement in those countries, it is certainly well situated for that purpose, or for annoying the trade of their enemies, in case of war.

1780.
January.

Our sportsmen were very unsuccessful in their pursuit of the feathered game, with which the woods are well stocked. One of our gentlemen had the good fortune to shoot a wild hen; and all the shooting parties agreed that they heard the crowing of the cocks on every side, which they described to be like that of our common cock, but shriller; that they saw several of them on the wing, but that they were exceedingly shy. The hen that was shot was of a speckled colour, and of the same shape, though not quite so large, as a full grown pullet of this country. Monsieur Sonnerat has entered into a long dissertation, to prove that he was the first person who determined the country to which this most beautiful and useful bird belongs, and denies that Dampier met with it here.

The land in the neighbourhood of the harbour is a continued high hill, richly adorned with a variety of fine tall trees, from the summit to the water's edge. Among others, we observed what Dampier calls the tar-tree*; but observed none that were tapped, in the manner he describes.

The inhabitants, who are fugitives from Cambodia and Cochin China, are not numerous. They are of a short stature, and very swarthy, and of a weak and unhealthy aspect; but, as far as we could judge, of a gentle disposition.

We remained here till the 28th of January; and, at taking leave of the *Mandarin*, Captain Gore, at his own request, Friday 28.

* Dampier, Vol. i. p. 390.

1780.
January.

gave him a letter of recommendation to the Commanders of any other ships that might put in here; to which he added a handsome present. He likewise gave him a letter for the Bishop of Adran, together with a telescope, which he begged might be presented to him as a compliment for the services he had received, through his means, at Condore.

The harbour at Pulo Condore is in latitude $8^{\circ} 40' 00''$ North.

Longitude, deduced from a great number of lunar observations, $\left. \begin{array}{l} \\ \end{array} \right\} 106^{\circ} 18' 46''$ East.

Dip of the North pole of the magnetic needle, $\left. \begin{array}{l} \\ \end{array} \right\} 2^{\circ} 1'$

Variation of the compass, $0^{\circ} 14'$ West.

High water, at the full and change of the moon, $\left. \begin{array}{l} \\ \end{array} \right\} 4^h 16^m$ apparent time.

From this time the water continued for twelve hours, without any visible alteration, viz. till $16^h 15^m$ apparent time, when it began to ebb; and at $22^h 15^m$ apparent time, it was low water. The change, from ebbing to flowing, was very quick, or in less than 5^m . The water rose and fell seven feet four inches perpendicular; and every day the same whilst we continued there.

C H A P. XI.

*Departure from Pulo Condore.—Pass the Straits of Banca.
 —View of the Island of Sumatra.—Straits of Sunda.
 —Occurrences there.—Description of the Island of Cracatoa.—Prince's Island.—Effects of the Climate of Java.
 —Run to the Cape of Good Hope.—Transactions there.
 —Description of False Bay.—Passage to the Orkneys.
 —General Reflections.*

ON the 28th day of January 1780, we unmoored; and, as soon as we were clear of the harbour, steered South South West for Pulo Timoan. On the 30th, at noon, the latitude, by observation, being $5^{\circ} 0'$ North, and longitude $104^{\circ} 45'$ East, we altered our course to South three quarters West, having a moderate breeze from the North East, accompanied by fair weather. At two in the morning of the 31st, we had soundings of forty-five fathoms, over a bottom of fine white sand; at which time our latitude was $4^{\circ} 4'$ North, longitude $104^{\circ} 29'$ East, and the variation of the compass $0^{\circ} 31'$ East.

1780.
 February.
 Friday 28.
 Sunday 30.

Monday 31.

At one in the afternoon, we saw Pulo Timoan; and, at three, it bore South South West three quarters West, distant ten miles. This island is high and woody, and has several small ones lying off to the Westward. At five, Pulo Puifang was seen bearing South by East three quarters East; and, at nine, the weather being thick and hazy, and hav-

1780.
January.

ing out-run our reckoning from the effect of some current, we were close upon Pulo Aor, in latitude $2^{\circ} 46'$ North, longitude $104^{\circ} 37'$ East, before we were well aware of it, which obliged us to haul the wind to the East South East. We kept this course till midnight, and then bore away South South East for the Straits of Banca.

February.
Tuesday 1.

On the 1st of February, at noon, our latitude, by observation, was $1^{\circ} 20'$ North, and the longitude, deduced from a great number of lunar observations taken in the course of the preceding twelve hours, 105° East. At the same time, the longitude, by Mr. Bayly's time-keeper corrected, was $105^{\circ} 15'$ East. We now steered South by East; and, at sun-set, having fine clear weather, saw Pulo Panjang; the body of the island bearing West North West, and the small islands, lying on the South East of it, West half South, seven leagues distant. Our latitude, at this time, was $0^{\circ} 53'$ North.

Wednes. 2.

On the 2d, at eight in the morning, we tried for soundings, continuing to do the same every hour, till we had passed the Straits of Sunda, and found the bottom with twenty-three fathoms of line. At noon, being in latitude, by observation, $0^{\circ} 22'$ South, longitude $105^{\circ} 14'$ East, and our soundings twenty fathoms, we came in sight of the little islands called Dominis, which lie off the Eastern part of Lingen; and which bore from North 62° West, to North, 80° West, five leagues distant. At this time we passed a great deal of wood, drifting on the sea; and, at one o'clock, we saw Pulo Taya, bearing South West by West, distant seven leagues. It is a small high island, with two round peaks, and two detached rocks lying off it to the Northward. When abreast of this island, we had soundings of fifteen fathoms. During this and the preceding day, we saw great quantities

of a reddish coloured scum or spawn, floating on the water, in a Southerly direction.

1780.
February.

At day-light, on the 3d, we came in sight of the Three Islands; and, soon after, of Monopin Hill, on the island of Banca. At noon, this hill, which forms the North East point of the entrance of the Straits, bore South. East half South, distant six leagues; our latitude, by observation, being $1^{\circ} 48'$ South, and longitude $105^{\circ} 3'$ East, the soundings seventeen fathoms, and no perceivable variation in the compass. Thursday 3.

Having got to the Westward of the shoal, called Frederick Endric, at half past two we entered the Straits, and bore away to the Southward; and, in the afternoon, Monopin Hill bearing due East, we determined its latitude to be $2^{\circ} 3'$ South, the same as in Mons. D'Après' map, and its longitude $105^{\circ} 18'$ East. At nine, a boat came off from the Banca shore, and having rowed round the ships, went away again. We hailed her in the Malaye tongue to come on board, but received no answer. At midnight, finding a strong tide against us, we anchored in twelve fathoms, Monopin Hill bearing North 29° West.

On the 4th, in the morning, after experiencing some difficulty in weighing our anchors, owing to the stiff tenacious quality of the ground, we proceeded with the tide down the Straits; the little wind we had from the Northward dying away as the day advanced. At noon, there being a perfect calm, and the tide making against us, we dropt our anchor in thirteen fathoms water, about three miles from what is called the Third Point, on the Sumatra shore; Monopin Hill bearing North 54° West. The latitude, by observation, was $2^{\circ} 22'$ South, longitude $105^{\circ} 38'$ East. At three, in the afternoon, we weighed and stood on through the Straits with a

Friday 4.

1780.
February.

light breeze; and, at eight, were abreast of the Second Point, and passed it within two miles, in seventeen fathoms water, a sufficient proof, that this point may be bordered upon with safety. At midnight, we again came to anchor, on account of the tide, in thirteen fathoms, Mount Permissang, on the island of Banca, bearing North 7° East, and the First Point South 54° East, distant about three leagues.

Saturday 5.

In the morning of the 5th, we weighed, and kept on to the South East; and, at ten, passed a small shoal, lying in a line with Lusepara and the First Point, at the distance of five miles from the latter. At noon, the island of Lusepara, bearing South, $57^{\circ} \frac{1}{2}$ East, four miles distant, we determined its latitude to be $3^{\circ} 10' \frac{1}{2}$ South, and longitude $106^{\circ} 15'$ East. The difference of longitude between the island Lusepara, which lies in the South entrance of the Straits of Banca, and Monopin Hill, which forms one side of the entrance from the North, we found to be $55'$, which is only two miles less than what is given in D'Après' chart.

In passing these Straits, the coast of Sumatra may be approached somewhat closer than that of Banca. At the distance of two or three miles from the shore, there are ten, eleven, twelve, or thirteen fathoms, free from rocks or shoals; however, the lead is the surest guide. The country is covered with wood down to the water's edge, and the shores are so low, that the sea overflows the land, and washes the trunks of the trees. To this flat and marshy situation of the shore, we may attribute those thick fogs and vapours, which we perceived, every morning, not without dread and horror, hanging over the island, till they were dispersed by the rays of the sun. The shores of Banca are much bolder, and the country inland rises to a moderate

height, and appears to be well wooded throughout. We often saw fires on this island during the night-time; but none on the opposite shore. The tide runs through the Straits at the rate of between two and three knots an hour.

1780.
February.

In the morning of the 6th, we passed to the Westward of Lusepara, at the distance of four or five miles; generally carrying soundings of five and six fathoms water, and never less than four. We afterward steered South by East; and having brought Lusepara to bear due North, and deepened our water to seven fathoms, we altered our course to South by West, keeping the lead going, and hauling out a little, whenever we shoaled our water. The soundings on the Sumatra side we still found to be regular, and gradually shoaling, as we approached the shore. At five in the afternoon we saw the Three Sisters, bearing South by West half West; and, at seven, we came to an anchor in ten fathoms, about eight miles to the North of the islands. The weather was close and sultry, with light winds, generally from the North West; but sometimes varying round as far as the North East; and, during the night, we observed much lightning over Sumatra.

Sunday 6.

We weighed, the next morning at five, and at eight were close in with the Sisters. These are two very small islands, well covered with wood, lying in latitude $5^{\circ} 0' \frac{1}{2}$ South, longitude $106^{\circ} 12'$ East, nearly North and South from each other, and surrounded by a reef of coral rocks; the whole circumference of which is about four or five miles. At noon we got sight of the island of Java to the Southward; the North West extremity of which (Cape St. Nicholas) bore South; North Island, on the Sumatra shore, South 27° West,

Monday 7.

and

1780.
February.

and the Sisters North, 27° East, distant four leagues; our latitude was $5^{\circ} 21'$ South, longitude $105^{\circ} 57'$ East.

At four in the afternoon, we saw two sail in the Straits of Sunda; one lying at anchor near the Mid-channel Island; the other nearer the Java shore. Not knowing to what nation they might belong, we cleared our ships for action; and at six came to an anchor in twenty-five fathoms, four miles East by South from North Island. Here we lay all night, and had very heavy thunder and lightning to the North West; from which quarter the wind blew in light breezes, accompanied with hard rain.

Tuesday 8.

At eight o'clock the next morning, we weighed, and proceeded through the Straits, the tide setting to the Southward, as it had done all night; but about ten the breeze failing, we came to again in thirty-five fathoms; a high island, or rather rock, called the Grand Toque, bearing South by East. We were, at this time, not more than two miles from the ships, which, now hoisting Dutch colours, Captain Gore sent a boat on board for intelligence. The rain still continued with thunder and lightning.

Early in the afternoon, the boat returned with an account that the large ship was a Dutch East-Indiaman, bound for Europe; and the other a packet from Batavia, with orders for the several ships lying in the Straits. It is the custom for the Dutch ships, as soon as their lading is nearly completed, to leave Batavia, on account of its extreme unwholesomeness, and proceed to some of the more healthy islands in the Straits, where they wait for the remainder of their cargo, and their dispatches. Notwithstanding this precaution, the Indiaman had lost, since her departure from Batavia,

tavia, four men, and had as many more whose recovery was despaired of. She had lain here a fortnight, and was now about to proceed to water at Cracatoa, having just received final orders by the packet.

1780.
February.

At seven in the morning of the 9th, we weighed, and stood on through the Straits to the South West, keeping pretty close in with the islands on the Sumatra shore, in order to avoid a rock near Mid-channel Island, which lay on our left. At half after ten, I received orders from Captain Gore to make sail toward a Dutch ship which now hove in sight to the Southward, and which we supposed to be from Europe; and, according to the nature of the intelligence we could procure from her, either to join him at Cracatoa, where he intended to stop, for the purpose of supplying the ships with arrack; or to proceed to the South East end of Prince's Island, and there take in our water, and wait for him.

I accordingly bore down toward the Dutch ship, which, soon after, came to an anchor to the Eastward; when the wind slackening, and the current still setting very strong through the strait to the South West, we found it impossible to fetch her, and having therefore got as near her as the tide would permit, we also dropt anchor. I immediately dispatched Mr. Williamson, in the cutter, with orders to get on board her if possible; but as she lay near a mile off, and the tide run with great rapidity, we soon perceived, that the boat was dropping fast astern. We therefore made the signal to return, and immediately began to veer away the cable, and sent out a buoy astern, in order to assist him in getting on board again. Our poverty, in the article of cordage, was here very conspicuous; for we had not a single coil

1780.
February.

coil of rope, in the store-room, to fix to the buoy, but were obliged to set about unreeving the studding-sail geer, the top-sail-halliards, and tackle-falls, for that purpose; and the boat was at this time driving to the Southward so fast, that it was not before we had veered away two cables, and almost all our running rigging, that she could fetch the buoy.

Thursday 10.

I was now under the necessity of waiting till the strength of the tide should abate, which did not happen till the next morning, when Mr. Williamson got on board the ship, and learnt, that she had been seven months from Europe, and three from the Cape of Good Hope; that before she sailed, France and Spain had declared war against Great Britain; and that she left Sir Edward Hughes, with a squadron of men of war, and a fleet of East-India ships, at the Cape. Mr. Williamson having, at the same time, been informed, that the water at Cracatoa was very good, and always preferred, by the Dutch ships, to that of Prince's Island, I resolved to rejoin the Resolution at the former place; and a fair breeze springing up, we weighed and stood over toward the island, where we soon after saw her at anchor; but the wind falling, and the tide setting strong against us, I was obliged to drop anchor, at the distance of about five miles from the Resolution, and immediately sent a boat on board, to acquaint Captain Gore with the intelligence we had received.

As soon as the Resolution saw us preparing to come to, she fired her guns, and hoisted an English jack at the ensign staff, the signal at sea to lead ahead. This we afterward understood was intended to prevent our anchoring, on account of the foul ground, which the maps she had on board placed

1780.
February.

placed here. However, as we found none, having a muddy bottom, and good holding ground, in sixty fathoms water, we kept fast till the return of the boat, which brought orders to proceed the next morning to Prince's Island. We were at this time two miles distant from the shore; the peak of Cracatoa bore North West by North; Bantam Point East North East half East; Prince's Island South West by West.

The island of Cracatoa is the Southernmost of a group situated in the entrance of the Straits of Sunda. It has a high peaked hill on the South end *, which lies in latitude $6^{\circ} 9'$ South, and longitude $105^{\circ} 15'$ East; the whole circuit of the island is not more than three leagues. Off the North East end lies a small island, which forms the road where the Resolution anchored; and within a reef that runs off the South end of the latter, there is good shelter against all Northerly winds, with eighteen fathoms water near the reef, and twenty-seven in the mid-channel. To the North West, there is a narrow pass for boats between the two islands.

The shore, which forms the Western side of the road, is in a North West direction, and has a bank of coral stretching into the sea, about one third of a cable's length, which makes the landing difficult for boats, except at high water; but the anchoring ground is very good, and free from rocks. The place where the Resolution watered is a small spring, situated abreast of the South end of the small island, at a short distance from the water-side. A little to the Southward, there is a very hot spring, which is used by the natives as a

* The island of Tamarin, or Sambouricou, which lies about four leagues to the North of Cracatoa, may be easily mistaken for the latter, having a hill of nearly the same size and form, situated also near its Southern extremity.

1780.
February.

bath. Whilst we were lying off the South end of this island, we sent a boat with the Master on shore, to look for water; but after having landed with some difficulty, he returned unsuccessful.

Cracatoa is esteemed very healthy, in comparison of the neighbouring countries. It consists of high land, rising gradually on all sides from the sea; and the whole is covered with trees, except a few spots which the natives have cleared for rice fields. The number of people on the island is very inconsiderable. Their Chief, as are those of all the other islands in the Straits, is subject to the King of Bantam. The coral reefs afford plenty of small turtles; but other refreshments are very scarce, and sold at an enormous price.

Latitude of the road where the Resolution

anchored - - - 8° 6' South.

Longitude, by Mr. Bayly's time-keeper - 104° 48' East.

Ditto, by observation - - 105° 36' East.

Dip of the South end of the magnetic needle 26° 3'

Variation of the compass - - 1° 0' West.

On the full and change days, it is high-water at 7^h in the morning. The water rises three feet two inches perpendicular.

Friday 11.

At eight o'clock in the evening, it began to blow fresh from the Westward, with violent thunder, lightning, and rain; and at three the next morning, we weighed and stood over for Prince's Island, but the Westerly wind dying away, was succeeded by a breeze from the South East, and, at the same time, a strong tide setting to the South West prevented our fetching the island, and obliged us, at two in the afternoon, to drop anchor in sixty-five fathoms, over a muddy bottom,

bottom, at three leagues distance from it; the high hill bearing South West by South, and the peak on Cracatoa North by East. We had light airs and calms till six next morning, when we weighed and made sail, having, in our endeavours to heave the anchor out of the ground, twice broken the old messenger, and afterward a new one, cut out of our best hawser. This, however, was intirely owing to the wretched state of our cordage, as the strain was not very considerable, and we had besides assisted the cable in coming in, by clapping the cat-tackle on it. The wind continuing fair, at noon we came to an anchor off the South East end of Prince's Island, in twenty-six fathoms, over a sandy bottom; the East end of the island bearing North North East, the Southernmost point in sight South West by South, the high peak North West half West, distant from the nearest shore half a mile.

1780.
February.

Saturday 12.

As soon as we had come to anchor, Lieutenant Lannyon, who had been here before with Captain Cook, in the year 1770, was sent along with the Master, to look for the watering-place. The brook from which, according to the best of his recollection, the Endeavour had been supplied, was found quite salt. Further inland, they saw a dry bed, where the water seemed to have lodged in rainy seasons; and, about a cable's length below, another run, supplied from an extensive pool, the bottom of which, as well as the surface, was covered with dead leaves. This, though a little brackish, being much preferable to the other, we began watering here early the next morning, and finished the same day.

Sunday 13.

The natives, who came to us soon after we anchored, brought a plentiful supply of large fowls, and some turtles;

1780.
February.
Monday 14.

but the last were for the most part very small. In the course of the night, we had heavy rain; and on the 14th, at daylight, we saw the Resolution to the Northward, standing toward the island, and at two in the afternoon, she dropt anchor close to us. In the course of the day, we heeled the ship, and scrubbed and hogged her bottom, which was very foul; and got ready for sea.

Tuesday 15.

The next day, Captain Gore not having completed his stock of water at Cracatoa, sent his men on shore, who now found the brook that was first mentioned, rendered perfectly sweet by the rain, and flowing in great abundance. This being too valuable a treasure to be neglected, I gave orders, that all the casks we had filled before should be started, and replenished with the fresh water, which was ac-

Wednes. 26.

cordingly done before noon the next day; and in the evening, we cleared the decks, and both ships were ready for sea.

Friday 18.

In the forenoon of the 18th, we had heavy rains, and variable winds, which prevented our getting under way till two in the afternoon, when a light wind sprung up from the Northward; but this soon after leaving us, we were obliged to drop our anchor again, at eight o'clock that night, in fifty fathoms water, and wait till the same hour

Saturday 19.

the next morning. At that time, being favoured by a breeze from the North West, we broke ground, to our inexpressible satisfaction, for the last time in the Straits of Sunda, and the next day, had intirely lost sight of Prince's Island.

This island having been already described by Captain Cook, in the history of a former voyage, I shall only add, that we were exceedingly struck with the great general resemblance of the natives, both in figure, colour, manners, and

1780.
February.

and even language, to the nations we had been so much conversant with, in the South Seas. The effects of the Javanese climate, and I did not escape without my full share of it, made me incapable of pursuing the comparison so minutely as I could have wished.

The country abounds with wood to such a degree, that notwithstanding the quantity cut down every year by the ships which put into the road, there is no appearance of its diminution. We were well supplied with small turtle, and fowls of a moderate size; the last were sold at the rate of ten for a Spanish dollar. The natives also brought us many hog-deer, and a prodigious number of monkeys, to our great annoyance, as most of our sailors provided themselves with one, if not two of these troublesome animals.

As we should have met with some difficulty in finding the watering-place, if Mr. Lannyon had not been with us, it may be worth while, for the use of future navigators, to describe its situation more particularly. The peaked hill on the island, bears from it North West by North; a remarkable tree growing upon a coral reef, and quite detached from the neighbouring shrubs, stands just to the Northward; and close by it, there is a small plot of reedy grass, the only piece of the kind that can be seen hereabout. These marks will shew the place where the pool empties itself into the sea; but the water here is generally salt, as well as that which is in the pool. The casks must therefore be filled about fifty yards higher up; where, in dry seasons, the fresh water that comes down from the hills, is lost among the leaves, and must be searched for by clearing them away.

The

1780.
February.

The latitude of the anchoring-place at			
Prince's Island was	-	-	6° 36' 15" South.
Longitude	-	-	105° 17' 30" East.
Dip of the South pole of the magnetic			
needle	-	-	28° 15' 0"
Variation of the compass	-	-	0° 54' 0" West.
Mean of the thermometer	-	-	83° $\frac{1}{2}$

From the time of our entering the Straits of Banca, we began to experience the powerful effects of this pestilential climate. Two of our people fell dangerously ill of malignant putrid fevers; which however we prevented from spreading, by putting the patients apart from the rest, in the most airy births. Many were attacked with teasing coughs; others complained of violent pains in the head; and even the healthiest among us felt a sensation of suffocating heat, attended by an insufferable languor, and a total loss of appetite. But though our situation was for a time thus uneasy and alarming, we had at last the singular satisfaction of escaping from these fatal seas, without the loss of a single life; a circumstance which was probably owing in part to the vigorous health of the crews, when we first arrived here, as well as to the strict attention, now become habitual in our men, to the salutary regulations introduced amongst us by Captain Cook.

On our leaving Prince's Island, and during the whole time of our run from thence to the Cape of Good Hope, the crew of the Resolution was in a much more sickly state than that of the Discovery. For though many of us continued, for some time, complaining of the effects of the noxious climate we had left, yet happily we all recovered from them.

Of the two who had been ill of fevers, one, after being seized with violent convulsions, on the 12th of February, which made us despair of his life, was relieved by the application of blisters, and was soon after out of danger. The other recovered, but more slowly. On board the Resolution, besides the obstinate coughs and fevers under which they very generally laboured, a great many were afflicted with fluxes, the number of whom, contrary to our expectations, continued increasing till our arrival at the Cape.

1780.
February.

Captain Gore attributed this difference in part, and probably with some reason, to the Discovery having her fireplace between decks; the heat and smoke of which he conceived might help to mitigate the bad effects of the damp night air. But I am rather inclined to believe, that we escaped the flux by the precautions that were taken to prevent our catching it from others. For if some kinds of fluxes be, as I apprehend there is no doubt they are, contagious, it is not improbable, that the Resolution caught this disorder from the Dutch ships at Cracatoa. In order to avoid this danger, when Mr. Williamson was sent to the Indian in the entrance of the Straits of Sunda, he had the strictest orders not to suffer any of our people, on any account whatever, to go on board; and whenever we had afterward occasion to have any communication with the Resolution, the same caution was constantly observed.

We were no sooner clear of Prince's Island, than we had a gentle breeze from the West North West; but this did not last long; for the following day the wind became again variable, and continued so till the noon of the 25th, when it grew squally, and blew fresh from the North.

Sunday 20.

On

1780.
February.
Tuesday 22.

On the 22d at noon, being in latitude $10^{\circ} 28'$ South, and longitude $104^{\circ} 14'$, we saw great quantities of boobies, and other fowls, that seldom go far from land; from which we conjectured, that we were near some small unknown island.

Friday 25.

In the evening of the 25th, the wind changed suddenly to the Southward, accompanied with heavy rains, and began to blow with great violence. During the night, almost every sail we had bent gave way, and most of them were split to rags; our rigging also suffered materially, and we were, the next day, obliged to bend our last suit of sails, and to knot and splice the rigging, our cordage being all expended. This sudden storm we attributed to the change from the monsoon to the regular trade-wind; our latitude was about $13^{\circ} 10'$ South, and we had made by our reckoning about $4^{\circ} \frac{1}{2}$ of longitude West from Java head.

Saturday 26.

From the 26th of this month to the 28th of March, we had a regular trade-wind from the South East to East by South, with fine weather; and being in an old beaten track met no occurrence that deserved the smallest notice.

March.
Tuesday 28.

In the morning of the 28th of March, being in latitude $31^{\circ} 42'$ South, and longitude $35^{\circ} 26'$ East, the trade-wind left us in a violent thunder storm. From this time to the 3d of

April.
Monday 3.

April, when our latitude was $35^{\circ} 1'$ South, and longitude $26^{\circ} 3'$ East, the winds were moderate, and generally from the South quarter. A fresh breeze then sprung up from the Eastward, which continued till the afternoon of the

Tuesday 4.

4th; after which we had a calm that lasted the two following days.

It had hitherto been Captain Gore's intention to proceed directly to St. Helena, without stopping at the Cape; but

the rudder of the Resolution having been, for some time, complaining, and, on being examined, reported to be in a dangerous state, he resolved to steer immediately for the Cape, as the most eligible place, both for the recovery of his sick, and for procuring a new main-piece to the rudder.

1780.
April.

From the 21st of March, when we were in latitude $27^{\circ} 22'$ South, longitude $52^{\circ} 25'$ East, to the 5th of April, when we had got into latitude $36^{\circ} 12'$ South, longitude $22^{\circ} 7'$ East, we were strongly affected by the currents, which set to the South South West, and South West by West, sometimes at the rate of eighty knots a day. On the 6th, having got under the lee of the African coast, we lost them intirely.

Wednes. 5.

Thursday 6.

In the morning of the 6th, a sail was seen to the South West standing toward us; and, as the wind soon after rose from the same quarter, we cleared our ships for action. We now discovered, from the mast-head, five sail more on our lee-bow, standing to the Eastward; but the weather coming on hazy, we lost sight of them all in an hour's time. Our latitude at noon was $35^{\circ} 49'$ South, longitude $21^{\circ} 32'$ East. At seven o'clock the next morning (the seventh), we made the land to the Northward at a considerable distance.

Friday 7.

On the 8th, the weather was squally, and blew fresh from the North West; the following day it settled to the West, and we passed pretty close to the sail seen on the 6th, but did not hail her. She was clumsy in figure, and, to appearance, unskilfully managed; yet she out-ailed us exceedingly. The colours which she hoisted were different from any we had seen; some supposed them to be Portugeze, others Imperial.

Saturday 8.

Sunday 9.

At day-light, the next morning, the land again appeared to the North North West; and, in the forenoon, a snow was

Monday 10.

1780.
April.

seen bearing down to us, which proved to be an English East-India packet, that had left Table Bay three days before, and was cruising with orders for the China fleet, and other India ships. She told us, that, about three weeks before, Monf. Trongoller's squadron, consisting of six ships, had sailed from the Cape, and was gone to cruise off St. Helena, for our East-India fleet. This intelligence made us conjecture, that the five sail we had seen standing to the Eastward must have been the French squadron, who, in that case, had given over their cruise, and were probably proceeding to the Mauritius. Having informed the packet of our conjectures, and also of the time we understood the China ships were to sail from Canton, we left them, and proceeded toward the Cape.

Wednes. 12.

Thursday 13.

In the evening of the 10th, the Gunner's Quoin bore North by East, and False Cape East North East; but the wind being at South West, and variable, prevented our getting into False Bay, till the evening of the 12th, when we dropt anchor abreast of Simon's Bay. We found a strong current setting to the Westward, round the Cape, which, for some time, we could but just stem, with a breeze that would have carried us four knots an hour. The next morning, we stood into Simon's Bay; and at eight came to anchor, and moored a cable each way; the best bower to the East South East, and small bower West North West; the South East point of the bay bearing South by East, Table Mountain North East half North; distant from the nearest shore one-third of a mile. We found lying here, the Nassau and Southampton East-Indiamen, waiting for convoy for Europe. The Resolution saluted the fort with eleven guns, and the same number was returned.

Mr.

1780.
April.

Mr. Brandt, the Governor of this place, came to visit us, as soon as we had anchored. This gentleman had conceived a great affection for Captain Cook, who had been his constant guest, the many times he had visited the Cape; and though he had received the news of his melancholy fate some time before, he was exceedingly affected at the sight of our ships returning without their old Commander. He appeared much surprized to see our crew in so stout and healthy a condition, as the Dutch ship that had left Macao, on our arrival there, and had touched at the Cape some time before, reported, that we were in a most wretched state, having only fourteen hands left on board the Resolution, and seven on board the Discovery. It is not easy to conceive the motive these people could have had for propagating so wanton and malicious a falsehood.

On the 15th, I accompanied Captain Gore to Cape Town; and, the next morning, we waited on Baron Plettenberg, the Governor, by whom we were received with every possible attention and civility. He had also conceived a great personal affection for Captain Cook, as well as the highest admiration of his character, and heard the recital of his misfortune, with many expressions of unaffected sorrow. In one of the principal apartments of the Governor's house, he shewed us two pictures, of Van Trump and De Ruyter, with a vacant space left between them, which he said he meant to fill up with the portrait of Captain Cook; and, for that purpose, he requested our assistance when we should arrive in England, in purchasing one for him, at any price.

We were afterward informed by the Governor, that all the powers at this time at war with England had given

1780.
April.

orders to their cruizers to let us pass unmolested. This, as far as related to the French, we had sufficient reason to think true; as Mr. Brandt had already delivered to Captain Gore, a letter from Mr. Stephens, inclosing a copy of Mons. de Sartine's orders, taken on board the *Licorne*. With respect to the Americans, the matter still rested on report; but Baron Plettenberg assured us, that he had been expressly told, by the Commander of a Spanish ship, which had touched at the Cape, that he, and all the officers of his nation, had received orders to the same effect. These assurances confirmed Captain Gore in the resolution he had taken, of maintaining, on his part, a neutral conduct; and accordingly, when, on the arrival of the *Sybil*, to convoy the India ships home, it was proposed to him to accompany them on their passage, he thought proper to decline an offer, the acceptance of which might, in case we had fallen in with any of the enemies ships, have brought him into a very difficult and embarrassing situation.

During our stay at the Cape, we met with every proof of the most friendly disposition toward us, both in the Governor and principal persons of the place, as well Africans as Europeans. At our first arrival, Colonel Gordon, the Commander of the Dutch forces, with whom, on our former visit here, I had the happiness of being on a footing of intimacy and friendship, was absent on a journey into the interior parts of Africa, but returned before our departure. He had, on this occasion, penetrated farther up the country than any other traveller had done before him, and made great additions to the valuable collection of natural curiosities with which he has enriched the Museum of the Prince of Orange. Indeed, a long residence at the Cape, and the

powerful assistance he has derived from his rank and situation there, joined to an active and indefatigable spirit, and an eager thirst after knowledge, have enabled him to acquire a more intimate and perfect knowledge of this part of Africa, than could have fallen to the lot of any other person: and it is with great pleasure I can congratulate the Public on the information I have received of his intentions to give the world, from his own hand, a history of his travels.

1780.
April.

False Bay, situated to the Eastward of the Cape of Good Hope, is frequented by shipping during the prevalence of the North West winds, which begin to blow in May, and make it dangerous to lie in Table Bay. It is terminated on the West by the Cape of Good Hope, and on the Eastward by False Cape.

The entrance of the Bay is six leagues wide, the two Capes bearing from each other due East and West. About eleven miles from the Cape of Good Hope, on the West side, is situated Simon's Bay, the only convenient station for ships to lie in; for although the road without it affords good anchorage, it is too open, and but ill circumstanced for procuring necessaries, the town being small, and supplied with provisions from Cape Town, which is about twenty-four miles distant. To the North North East of Simon's Bay, there are several others, from which it may be easily distinguished, by a remarkable sandy way to the Northward of the town, which makes a striking object. In steering for the harbour, along the West shore, there is a small flat rock, called Noah's Ark, and about a mile to the North East of it, several others, called the Roman Rocks. These lie one mile and a half from the anchoring place; and either
between

1780.
April.

between them, or to the Northward of the Roman Rocks, there is a safe passage into the Bay. When the North West gales are set in, the following bearings will direct the mariner to a safe and commodious birth: Noah's Ark, South 51° East, and the centre of the hospital South 53° West, in seven fathoms. But if the South East winds have not done blowing, it is better to stay further out in eight or nine fathoms. The bottom is sandy, and the anchors settle considerably before they get hold. All the North part of the Bay is low sandy land, but the East side is very high. About six miles East of Noah's Ark lies Seal Island, the South part of which is said to be dangerous, and not to be approached, with safety, nearer than in twenty-two fathoms. Off the Cape of Good Hope are many sunk rocks, some of which appear at low water; and others have breakers constantly on them.

The latitude of the anchoring-place in Si-

mon's Bay, by observation	-	-	$34^{\circ} 20'$ South.
The longitude	-	-	$18^{\circ} 29'$ East.
Dip of the South end of the magnetic needle			$46^{\circ} 47'$
Variation of the compass	-	-	$22^{\circ} 16'$ West.

On the full and change days, it was high-water at $5^h 55^m$ apparent time; the tide rose and fell five feet five inches; at the neap tides, it rose four feet one inch.

From the observations taken by Mr. Bayly and myself, on the 11th of this month, when the Cape of Good Hope bore due West, we found its latitude to be $34^{\circ} 23'$ South, which is $4'$ to the Northward of its position, as determined by the Abbé de la Caille.

Having

THE PACIFIC OCEAN.

47

Having completed our victualling, and furnished ourselves with the necessary supply of naval stores, we sailed out of the Bay on the 9th of May, and on the 14th, we got into the South East trade-wind, and steered to the Westward of the islands of St. Helena and Ascension. On the 31st, being in latitude $12^{\circ} 48'$ South, longitude $15^{\circ} 40'$ West, the magnetic needle was found to have no dip.

1780.
May.

Tuesday 9.

Wednes. 31.
Sunday 14.

On the 12th of June, we passed the equator for the fourth time during this voyage, in longitude $26^{\circ} 16'$ West. We now began to perceive the effects of a current setting North by East, half a knot an hour. It continued in this direction till the middle of July, when it began to set a little to the Southward of the West.

June.
Monday 12.

July.
Saturday 15.

On the 12th of August, we made the Western coast of Ireland, and after a fruitless attempt to get into Port Galway, from whence it was Captain Gore's intention to have sent the journals and maps of our voyage to London, we were obliged, by strong Southerly winds, to steer to the Northward. Our next object was to put into Lough Swilly; but the wind continuing in the same quarter, we stood on to the Northward of Lewis Island; and on the 22d of August, at eleven in the morning, both ships came to an anchor at Stromness. From hence, I was dispatched by Captain Gore, to acquaint the Board of Admiralty with our arrival; and on the 4th day of October the ships arrived safe at the Nore, after an absence of four years, two months, and twenty-two days.

August.
Saturday 12.

Tuesday 22.

October.
Wednes. 4.

On quitting the Discovery at Stromness, I had the satisfaction of leaving the whole crew in perfect health; and at the same time, the number of convalescents on board the Resolution, did not exceed two or three, of whom only one was incapable of service. In the course of our voyage, the

1780.
October.

Resolution lost but five men by sickness, three of whom were in a precarious state of health at our departure from England; the Discovery did not lose a man. An unremitting attention to the regulations established by Captain Cook, with which the world is already acquainted, may be justly considered as the principal cause, under the blessing of Divine Providence, of this singular success. But the baneful effects of salt provisions might perhaps, in the end, have been felt, notwithstanding these salutary precautions, if we had not assisted them, by availing ourselves of every substitute, our situation at various times afforded. These frequently consisting of articles, which our people had not been used to consider as food for men, and being sometimes exceedingly nauseous, it required the joint aid of persuasion, authority, and example, to conquer their prejudices and disgusts.

The preventives we principally relied on were four kroust and portable soup. As to the antiscorbutic remedies, with which we were amply supplied, we had no opportunity of trying their effects, as there did not appear the slightest symptoms of the scurvy, in either ship, during the whole voyage. Our malt and hops had also been kept as a resource, in case of actual sickness, and on examination at the Cape of Good Hope, were found intirely spoiled. About the same time, were opened some casks of biscuit, flour, malt, pease, oatmeal, and groats, which, by way of experiment, had been put up in small casks, lined with tin-frail, and found all, except the pease, in a much better state, than could have been expected in the usual manner of package.

I cannot neglect this opportunity of recommending to the consideration of Government, the necessity of allowing a sufficient

cient quantity of Peruvian bark, to such of his Majesty's ships as may be exposed to the influence of unwholesome climates. It happened very fortunately in the Discovery, that only one of the men that had fevers in the Straits of Sunda, stood in need of this medicine, as he alone consumed the whole quantity usually carried out by Surgeons, in such vessels as ours. Had more been affected in the same manner, they would probably all have perished, from the want of the only remedy capable of affording them effectual relief.

1780.
August.

Another circumstance attending this voyage, which, if we consider its duration, and the nature of the service in which we were engaged, will appear scarcely less singular than the extraordinary healthiness of the crews, was, that the two ships never lost sight of each other for a day together, except twice; which was owing, the first time, to an accident that happened to the Discovery off the coast of Owhyhee; and the second, to the fogs we met with at the entrance of Awatska Bay. A stronger proof cannot be given of the skill and vigilance of our subaltern officers, to whom this share of merit almost intirely belongs.

A P P E N D I X.

3 R 2

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

REPORT OF THE PHYSICS DEPARTMENT
FOR THE YEAR 1954-1955

A P P E N D I X, No. I.

TABLES of the ROUTE of the RESOLUTION and DISCOVERY, the Variation of the Compass, and Meteorological Observations, during the Voyage.

N. B. In these Tables, the Situation of the Ships at Noon is, in general, set down; and the Variation, as it was observed, either in the Morning or Evening of the same Day, or both. Therefore, the Tables do not contain the exact Place where the Variation was observed; but the Difference is so little, that it can make no material Error.

T A B L E I.
From the Cape of Good Hope to Kerguelen's Land.

Time.	Latitude South.	Longitude East.	Variation West.	Therm.	Barom.	Winds, Weather, and Remarks.
1776. Dec. 2 } Noon. }	0	0	0	59	Inches. 30,08	Westerly. Moderate wind and cloudy weather.
	3 34 32	17 36	22 00	64	29,75	Northerly. Light winds, and cloudy.
	4 36 48	19 05	22 30	60 $\frac{1}{2}$	29,59	N. W. Fresh gale, and cloudy.
	5 38 21	21 23	23 00	59	29,48	W. N. W. A strong gale, and cloudy.
	6 38 59	23 29	23 33	63	29,37	Variable. Squally, with rain.
	7 40 03	25 25		58 $\frac{1}{2}$	29,47	W. S. W. Brisk wind, thunder, lightning, and rain.
	8 41 04	28 5	24 00	47 $\frac{1}{2}$	29,81	W. S. W. Squally, with hail and rain.
	9 42 27	30 7		54	29,80	W. S. W. Strong gales, and cloudy.

TABLE I. Continued.

Route of the Resolution and Discovery from the Cape of Good Hope to Kerguelen's Land.

Time.	Latitude South.	Longitude East.	Variation West.	Therm.	Barom.	Winds, Weather, and Remarks.
1776.	°	°	°	°	Inches.	
Dec. 10	43 56	32 13	24 45	51 $\frac{1}{2}$	29,34	Northerly. Moderate wind, and drizzling rain.
11	45 37	34 31	25 00	44 $\frac{1}{2}$	29,21	Westerly. A fresh gale, and cloudy.
12	46 20 $\frac{1}{2}$	37 0	26 00	38		S. W. Squally. Showers of hail and snow. Saw sea-birds, and sea-weed.
13	47 15	40 48	26 15	38 $\frac{2}{3}$	29,98	W. S. W. Strong gale and squally, with snow. In the evening sailed between P. Edward's Islands.
14	47 46	44 15		41 $\frac{1}{2}$	30,02	Westerly. Gentle breezes, and hazy weather.
15	48 24 $\frac{1}{2}$	48 16 $\frac{3}{4}$	31 00	42 $\frac{2}{3}$	29,90	N. E. Fresh gales, and cloudy. Rock-weed.
16	48 42	52 11		41	29,70	N. N. E. Strong wind, and cloudy. Penguins; whales, &c.
17	48 28	56 6		42	29,97	Variable wind and weather. Albatrosses, penguins, &c.
18	48 35 $\frac{1}{2}$	56 40		42	30,02	Variable, moderate, and cloudy. Penguins, whales, &c.
19	48 26	59 20		45	29,97	Westerly. Foggy, with some rain. Rock-weed. Few birds.
20	48 27	62 43		44	29,96	N. W. Moderate and hazy. Rock-weed. Few birds.
21	48 27	65 53		46	29,77	N. W. b. W. A fresh gale, and foggy. Very few birds.
22	48 18	66 20		40	29,97	Westerly. Light winds, and gloomy weather. Birds.
23	48 36	67 26 $\frac{1}{2}$		43 $\frac{1}{2}$	29,58	N. E. Mod. wind, rain. Many birds.
24	48 24	68 35		40 $\frac{1}{2}$	29,72	Northerly. Fresh gale, and cloudy. Saw land.
25	48 41	69 11	27 44	43	29,95	N. W. Moderate and hazy. In Christmas Harbour, Kerguelen's Land.

TABLE II.

Route of the Resolution and Discovery from Kerguelen's Land to Van Diemen's Land.

Time.	Latitude South.	Longitude East.	Variation West.	Therm.	Barom.	Winds, Weather, and Remarks.
					Inches.	
1770. Dec. 29	48 51	69 39	28 0	44 $\frac{1}{4}$	29,71	S. E. Fresh gales, and fair weather.
30	49 8	70 34	28 0	45	29,44	N. W. Fresh gales, and cloudy.
31	49 19	73 16		40	29,54	Ditto. Ditto, ditto.
1777. Jan. 1	48 37	77 41	30 24	38	30,05	W. S. W. Squally, with fleet.
2	48 20	80 50	30 47	46 $\frac{1}{2}$	30,23	W. S. W. Moderate wind, and fair weather.
3	48 17	84 14	30 14	46	30,15	N. W. Ditto, ditto. No birds.
4	48 9 $\frac{1}{2}$	88 30		47 $\frac{1}{4}$	30,28	N. W. Fresh gales, and foggy.
5	48 4 $\frac{1}{2}$	91 25		48 $\frac{1}{4}$	29,78	N. W. b. N. Gentle breezes, and hazy weather.
6	47 59	93 59		47	29,70	Westerly. Moderate wind, and hazy, with rain.
7	47 43	95 28		47 $\frac{3}{4}$	29,68	Easterly. Light breezes, and foggy; rain at times.
8	47 37	99 21	25 29	48	29,86	North. Moderate wind, and thick fog. Few birds.
9	47 56	102 36	24 7 $\frac{1}{2}$	48 $\frac{1}{2}$	29,67	N. N. E. Fresh breezes, and foggy.
10	48 20	106 14	23 37	48 $\frac{1}{2}$	29,78	Ditto. Fresh breezes, and foggy; with rain at times.
11	48 16	109 6		49	29,70	Ditto. Moderate wind, and hazy. Porpoises, and some birds.
12	48 40	110 26		50 $\frac{1}{2}$	29,66	Ditto. Light breezes, and foggy. Some birds.
13	48 6	112 3		49	29,20	Variable. Moderate wind, and foggy. Birds, and porpoises.
14	47 19	115 28	17 34	49	29,36	Westerly. Fresh gales, and hazy. Passed rock-weed.
15	46 23	120 7		51 $\frac{1}{2}$	29,50	W. N. W. Ditto, and some rain. Many blue peterels.
16	45 12	124 29		54 $\frac{1}{2}$	29,70	N. W. Brisk wind, with drizzling rain.
17	44 18	128 12	9 0	56 $\frac{1}{2}$	29,87	N. W. Fresh gales, and cloudy weather.
18	44 23	131 28	6 0	55	29,55	N. b. E. Moderate wind, with clouds at times.

T A B L E II. Continued.
Route of the Resolution and Discovery from Kerguelen's Land to
Van Diemen's Land.

Time.	Latitude. South.	Longitude East.	Variation West.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1777.	°	°	°	°		
Jan. 19	43 51	134 39		56 $\frac{3}{4}$	29,55	N. W. Brisk wind, some hard squalls ; mostly clear.
20	43 33 $\frac{1}{2}$	138 19		56 $\frac{3}{4}$	29,40	N. W. Fresh gales, and fine weather. A Westerly swell.
21	43 23	141 16	East. 1 0	56	29,95	West. Fresh gales, and fine weather. Some showers.
22	43 31 $\frac{1}{2}$	143 1	3 0	61	30,09	West. Gentle breezes, and fine weather. Westerly swell.
23	43 41 $\frac{2}{8}$	144 27		60 $\frac{1}{2}$	30,02	W. N. W. Light winds, and mostly cloudy. At 3 P. M. saw Van Diemen's Land.
24	43 47	147 0	5 15	55	30,26	S. W. Moderate wind, and fine wea- ther.
25	43 42 $\frac{1}{2}$	147 24	10 8	58 $\frac{1}{2}$	30,30	Variable. Light airs, and fine weather. Off Van Diemen's Land.
26	43 33 $\frac{1}{2}$	147 42		67 $\frac{1}{2}$	30,15	Ditto. Ditto weather. Off Adventure Bay.

TABLE III.

Route of the Resolution and Discovery from Adventure Bay, Van Diemen's Land, to New Zealand.

Time.	Latitude South.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
					Inches.	
1777. Jan. 31	43 23 $\frac{1}{2}$	149 29	0	63 $\frac{1}{4}$	30,26	Variable. Moderate wind, and cloudy.
Feb. 1	44 16 $\frac{1}{2}$	152 9		63 $\frac{3}{4}$	29,97	N. N. E. Fresh gales, and cloudy. Passed a whale.
2	44 42 $\frac{1}{2}$	154 51	7 30	62	29,93	North. Fresh gales, foggy. Rain at times.
3	44 42 $\frac{3}{4}$	157 41		64 $\frac{1}{2}$	30,06	N. b. W. Moderate breeze, and fine weather. Sea weed, &c.
4	44 1	160 13	11 0	60	30,05	N. W. b. N. Moderate wind, and hazy.
5	43 32	161 59	11 11	59	30,09	S. E. b. S. Moderate wind, and fine weather. Many peterels and albatrosses.
6	42 56	163 39	13 0	63 $\frac{3}{4}$	29,90	W. S. W. Gentle breezes, and fair weather.
7	42 27	165 23	13 0	67	30,00	W. S. W. Light winds, and fair weather.
8	41 54	167 29	13 0	66		N. W. b. N. Gentle gale, and fair weather; some lightning.
9	40 59 $\frac{1}{2}$	169 30		64	29,95	Westerly. Moderate wind, and fair weather. Saw two turtle, and several logs of wood.
10	40 35 $\frac{1}{2}$	171 27		63	30,20	Southerly. Squally and unfettered weather. Passed several logs of wood. At half past four P. M. saw New Zealand, S. E.
11	40 28 $\frac{1}{3}$	174 15		64		Variable. Light winds, and fair weather. A very heavy dew. Cape Farewell, in New Zealand, S. 64° W. and Murderer's Bay S. 34° E.

T A B L E IV.

Route of the Resolution and Discovery from Queen Charlotte's Sound,
New Zealand, to the Friendly Isles.

Time.	Latitude South.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1777.	°	°	°	°		
Feb. 26	41 38 $\frac{1}{2}$			63 $\frac{3}{4}$	29,97	{ Variable. Moderate wind, and some- times cloudy.
27	41 43	176 49		63 $\frac{1}{2}$	30,00	{ Ditto. Moderate wind and cloudy weather.
28	41 17 $\frac{1}{2}$	177 17	12 23 $\frac{1}{2}$	64	30,09	{ Easterly. Moderate breeze, and some clouds.
March 1	42 35	178 43		58 $\frac{1}{2}$	29,85	{ N. E. Moderate wind, and some rain. Many albatrosses.
2	42 35 $\frac{1}{2}$	180 8 $\frac{1}{2}$		63 $\frac{3}{4}$	29,91	{ N. E. Light breezes, and fine weather. Egg birds. A swell from N. E.
3	42 24	182 36		60	29,53	{ Variable. Brisk wind; squally with rain at times. Saw a Port Egmont hen.
4	41 10 $\frac{1}{2}$	185 5		64	29,52	{ Westerly. Brisk wind, and fine weather. Passed rock-weed.
5	39 50 $\frac{3}{4}$	187 26	13 23	60 $\frac{1}{2}$		{ S. W. Fresh gale, and fine weather. A S. W. swell. Weed, &c.
6	39 10	189 21		66	29,80	{ Westerly. Fresh breeze, and fine wea- ther. Whales. The swell gone.
7	39 17	191 13	11 13	68	29,97	{ N. b. W. Fresh breezes, and fine wea- ther; some showers.
8	39 24	192 52		69 $\frac{3}{4}$	30,17	{ N. b. W. Gentle breezes, and fine wea- ther. A copious dew.
9	39 30 $\frac{1}{2}$	194 10		68	30,30	{ N. b. W. Gentle breezes, and cloudy. A heavy dew.
10	39 26	195 22	10 49	69	30,32	{ N. N. W. Gentle breezes, and fine weather. A strong dew.
11	39 50	196 4		68 $\frac{1}{2}$		{ Northerly. Light airs, and fine weather. A heavy dew.
12	38 41 $\frac{3}{4}$	196 11		68 $\frac{1}{2}$	30,12	{ Variable. Light airs, and fair weather. Many porpoises.
13	36 59 $\frac{1}{2}$	197 30		66	30,02	{ S. E. b. E. Fresh gales, and cloudy; some rain. Many porpoises.
14	35 28	198 43		68 $\frac{1}{4}$	29,98	{ S. E. Fresh breezes, and squally; some rain. Few birds.
15	34 6 $\frac{1}{2}$	198 57	10 18	69	29,94	{ Easterly. Fresh gales, and showery wea- ther.

TABLE IV. Continued.

Route of the Resolution and Discovery from Queen Charlotte's Sound, New Zealand, to the Friendly Isles.

Time.	Latitude South.	Longitude East.	Variation East.	Therm.	Brom.	Winds, Weather, and Remarks.
1777.	°	°	°	°	Inches.	
March 16	33 40	199 6	10 19	72	30,00	Northerly. Light winds, and drizzling rain.
17	33 24	199 19		74	30,05	Variable. Small breezes, and cloudy weather.
18	32 4	200 14		69 $\frac{1}{2}$	30,10	E. b. S. Moderate wind, and cloudy, with rain at times.
19	30 29	200 54		75 $\frac{1}{2}$	29,99	Easterly. Moderate wind, with showers.
20	29 4	201 15	9 39	73 $\frac{3}{4}$	29,97	Easterly. Moderate breezes, with showers.
21	27 44	201 30		73 $\frac{1}{2}$	29,94	Easterly. Gentle breezes, with cloudy weather.
22	26 52	201 34	8 37	75 $\frac{1}{2}$	29,97	E. b. N. Light breezes, and clear. Egg and Tropic birds.
23	25 59	201 8		77 $\frac{1}{2}$	29,93	Easterly. Light breezes, and clear weather. Flying fish.
24	25 22 $\frac{1}{2}$	201 30 $\frac{1}{2}$		76 $\frac{1}{2}$	30,02	E. N. E. Light breezes, and clear weather. Sharks, dolphin, and flying fish.
25	24 26 $\frac{1}{4}$	201 23		78	30,01	E. N. E. Light breezes, and clear weather. Tropic birds.
26	23 40	201 23	8 25	78	30,03	East. Ditto weather. Some lightning. Saw Tropic birds, and caught two sharks.
27	23 17	201 23		80	30,00	Easterly. Light breezes, and fair weather. Saw several dolphins.
28	22 44	201 12	8 33	82 $\frac{1}{2}$	30,02	N. E. Little wind, and mostly cloudy.
29	22 13	201 40		79 $\frac{1}{2}$	29,99	Easterly. Light breezes, and fine weather. Saw land.
30	21 54 $\frac{1}{2}$	201 49		80 $\frac{1}{2}$	29,96	Easterly. Squally, with rain at times. A large island, moderately high, S. W. three or four miles.
31	20 26 $\frac{1}{3}$	201 34		81	29,97	E. N. E. Moderate wind, and fine weather. Saw land, which proved to be two islands.
April 1	19 51 $\frac{1}{3}$	202 50		82	29,93	E. N. E. Little wind, and fine weather. The greater island bore S. 80° E. distant about four miles.

T A B L E IV. Continued.

Route of the Resolution and Discovery from Queen Charlotte's Sound,
New Zealand, to the Friendly Isles.

Time.	Latitude South.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1777.	°	'	°	°		
April	2 20	0 $\frac{1}{2}$	201 41	8 21	83 $\frac{1}{2}$	30,02 { E. N. E. Little wind and fine weather. The larger island, N. 70° E. distant two miles.
3	Plying off the islands of	Wateoo, and	Wenua-ete.			Little wind, and fair weather.
4	19 51	201 32		83	29,96	Easterly. Little wind, and fine weather.
5	19 16 $\frac{1}{2}$	201 28		83 $\frac{1}{4}$	30,00	E. N. E. Light airs, and cloudy.
6	19 16	201 0		82 $\frac{1}{2}$	30,00	Easterly. Little wind, with showers. Harvey's Isle, S. $\frac{1}{2}$ E. distant two miles.
7	19 27 $\frac{1}{4}$	199 58		82 $\frac{1}{2}$	29,98	Ditto. Little wind, and variable weather.
8	19 7	199 32		83	29,91	Ditto. Light airs, and clear weather.
9	18 57	199 12	7 26 $\frac{1}{2}$	81 $\frac{1}{4}$	29,83	Ditto. Almost calm, with showers.
10	18 39 $\frac{1}{2}$	198 24		82 $\frac{3}{4}$	29,75	Variable. Squally. Thunder and light- ning, with rain.
11	18 20	197 20		81	29,83	Ditto. Moderate wind. Ditto weather. Collected five puncheons of rain-water.
12	18 10	197 20		81	29,83	N. W. Moderate wind, and cloudy with lightning.
13	18 7	197 7		81	29,97	Variable. Squally. Some lightning. Heavy rain.
14	18 8 $\frac{3}{4}$	196 35		83	29,90	N. Easterly. Little wind, and rainy weather. Palmerston's Island, N. b. E. two or three miles.
18	18 4 $\frac{1}{2}$	196 10		83 $\frac{1}{2}$	29,92	Northerly. Light breezes, and fine wea- ther. A swell from the S.
19	17 59 $\frac{1}{2}$	195 9		80	29,88	Ditto. Light breezes, with showers.
20	18 8	193 59		83 $\frac{1}{2}$	29,82	N. W. Moderate wind, and showers. Fish and birds.
21	18 37 $\frac{1}{2}$	192 42		79	29,83	N. W. Fresh gales, and showers. Much fish, and many birds.
22	18 35	192 21		79	29,96	Variable. Little wind, with rain.
23	18 51	191 0		79	29,95	Ditto. Moderate wind. Thunder, light- ning, and rain.
24	19 25 $\frac{1}{2}$	189 40	10 33	76	29,94	Ditto. Squally unfettered weather. Saw Savage Isle.
25	19 47	188 44		75	29,90	Ditto. The same weather.

TABLE IV. Continued.

Route of the Resolution and Discovery from Queen Charlotte's Sound,
New Zealand, to the Friendly Isles.

Time.	Latitude South.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
^{1777.} April 26	20 11 $\frac{1}{2}$	187 44	0	74 $\frac{1}{2}$	29,88	Variable. Squally, with rain.
27	20 38	186 35		76 $\frac{1}{4}$	29,94	Ditto. Little wind and cloudy, with rain.
28	20 28 $\frac{1}{2}$	185 36		81 $\frac{1}{2}$	29,85	Ditto. Moderate wind, and cloudy. Saw the Friendly Isles.
29		185 21		80	30,05	Ditto. Moderate wind, with showers. Annamooka; N. W. b. W. distant about three leagues.

TABLE V.

Route of the Resolution and Discovery from the Friendly Isles to Otaheite.

Time.	Latitude South.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
^{1777.} July 18	22 7	185 10	10 0	70 $\frac{3}{4}$	29,93	East. Brisk wind, and squally, with rain.
19	22 26 $\frac{1}{2}$	186 9 $\frac{1}{2}$	8 42	69	30,03	Variable. Moderate wind, and fair weather.
20	22 28	186 41		70	30,10	S. E. Light winds, and cloudy. Saw many dolphins.
21	22 59 $\frac{1}{2}$	187 3		71	30,11	Easterly. Moderate wind, and fair weather. Dolphins.
22	24 4	187 59		72	30,12	N. E. Moderate wind, and cloudy.
23	24 50	189 41		74	30,02	N. E. Moderate wind, and dark cloudy weather.
24	25 23	191 19		73 $\frac{1}{4}$	30,03	N. N. E. Moderate wind, and hazy, with rain. Saw a gannet.
25	25 45	192 21	8 47	74	30,20	N. N. E. Moderate wind, and fine weather.
26	26 8 $\frac{1}{4}$	193 46		80	30,16	N. b. E. Moderate wind, and drizzling rain at times.
27	26 51 $\frac{1}{4}$	194 45	7 52	71 $\frac{1}{4}$	30,20	N. N. E. Squally, with showers.

TABLE V. Continued.

Route of the Resolution and Discovery from the Friendly Isles to Otaheite.

Time.	Latitude South.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1777. July	28 27 36	195 55	8 13	72 $\frac{1}{2}$	30,13	N. N. E. Brisk wind, and fair weather.
	29 28 7	197 11		70	29,70	Ditto. Brisk wind, and showers.
	30 28 6	198 55		61 $\frac{1}{2}$	29,54	Northerly. Strong gales, and squally, with rain.
	31 27 53	200 37		63 $\frac{1}{2}$	29,92	S. W. Moderate wind, and flying clouds. Swell from the S. S. W.
August	1 27 49	202 11 $\frac{1}{2}$	7 44	67	30,00	Westerly. Brisk wind, and squally, with showers.
	2 27 28	203 50	7 8	69 $\frac{1}{2}$	30,13	Ditto. Moderate wind, and cloudy, with some rain.
	3 27 43 $\frac{1}{2}$	204 0		71 $\frac{1}{2}$	30,16	Variable. Light winds, and fair weather.
	4 27 33 $\frac{1}{2}$	205 35		67 $\frac{1}{2}$	30,00	Ditto. Moderate wind, and cloudy, with rain.
	5 26 51	206 29		67 $\frac{1}{2}$	30,11	S. W. Gentle breezes, and fine weather.
	6 25 53 $\frac{1}{2}$	207 40		65	30,21	S. W. Gentle breezes, and some showers.
	7 25 9	208 58	7 37 $\frac{1}{2}$	68 $\frac{1}{2}$	30,25	S. S. W. A gentle breeze, and fine weather.
	8 23 56	210 17 $\frac{1}{2}$	7 21	66	30,22	Southerly. A gentle breeze, and fine weather. Saw land (Toobouai) bearing N. N. E.
	9 23 7 $\frac{1}{2}$	210 44		71	30,20	S. E. A gentle breeze, and fine weather.
	10 21 12	211 12		72	30,16	E. b. S. Fresh breezes, and cloudy.
	11 19 14 $\frac{1}{2}$	211 43		77	30,16	Ditto. Fresh gale, with showers.
	12 17 46			81	30,17	Easterly. Light winds, and showers. Oheitepeha Bay, in Otaheite, W. $\frac{1}{2}$ S. distant two or three leagues.

TABLE VI.

Route of the Resolution and Discovery from the Society Isles to Christmas Island.

Time.	Latitude South.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1777. Decem. 9	15 42 $\frac{1}{2}$	207 41	5 45	82	Inches. 29,97	E. b. N. Moderate wind, and showers.
10	14 32	207 34	5 35	85	29,93	E. b. N. Gentle breezes, and pleasant weather.
11	13 45	207 7		83	29,92	N. E. b. E. Squally, with showers.
12	13 1	206 20	5 21	85	30,00	N. E. b. N. A light breeze, and fair weather.
13	12 17	205 58		83 $\frac{3}{4}$	29,93	N. E. b. E. Gentle breezes, and fair weather.
14	11 3	205 54	5 58 $\frac{1}{2}$	83 $\frac{3}{4}$	29,91	E. N. E. A fresh gale, and some rain.
15	9 59	205 23	5 19	84	29,90	East. A fresh breeze, and fair weather.
16	8 57	205 5	5 7 $\frac{1}{2}$	84	29,83	E. b. N. A light breeze, and clear.
17	7 38 $\frac{1}{2}$	204 29	4 54	85	29,88	E. N. E. A fresh breeze, and fine weather. Tropic birds, egg-birds, and sheerwaters.
18	6 24	207 19	5 21	84 $\frac{3}{4}$	29,88	Easterly. A gentle breeze, and fine weather. Many birds.
19	4 56 $\frac{1}{2}$	204 9		83 $\frac{3}{4}$	29,90	E. b. N. A fresh breeze. Many birds.
20	3 32	203 39	5 29	82 $\frac{1}{2}$	29,88	Easterly. A fresh breeze, and passing clouds. Few birds, except terns, and egg-birds.
21	2 2 $\frac{1}{2}$	203 9	5 44	82 $\frac{1}{4}$	29,91	E. b. N. Moderate wind, and some showers. A few egg-birds.
22	0 34S.	202 57		81	29,93	East. A fresh breeze, and fine weather. Men-of-war, terns, and tropic birds.
23	0 45N.	202 38	6 49	82	30,07	East. Moderate wind, and fine weather. Many birds.
24	2 2 $\frac{1}{2}$	202 33	6 20	83	30,08	E. S. E. Moderate wind. Christmas Isle E. S. E, four miles.
25				79	29,99	Easterly. A gentle breeze, and fine weather. Plying off the Isle.
26	1 57 $\frac{1}{2}$	202 34		80	30,09	Easterly. Moderate wind, and fine weather. At anchor off the West side of the island.

TABLE VII.

Route of the Resolution and Discovery from Christmas Island to Sandwich Isles.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1778. Jan.	2 2 27	202 36	°	82 $\frac{3}{4}$	29,97	E. S. E. A fresh gale.
	3 3 22	202 35		83	29,97	Easterly. Moderate wind; some rain.
	4 4 8	202 45		81 $\frac{1}{4}$	29,90	Ditto. Moderate breeze, and fair weather.
	5 4 56	203 0		78	29,90	Ditto. Light winds, and drizzling rain.
	6 5 48	203 12	5 58	80 $\frac{3}{4}$	29,87	E. b. S. Moderate wind, and showers. Many birds.
	7 6 43	203 54		77	29,85	Easterly. A gentle breeze, and some rain. Saw birds and drift-wood.
	8 7 45	205 0	6 46	78 $\frac{1}{2}$	29,96	Ditto. Moderate wind, and some rain. Strong current setting N. E.
	9 8 12	205 12	6 47	82	29,93	Ditto. Light airs, and fine weather.
	10 9 30	205 0		83 $\frac{1}{2}$	29,90	E. N. E. Gentle breezes, with showers. Some birds.
	11 10 44	204 49		83	29,89	Easterly. Light breezes, and fine weather. Saw a turtle.
	12 12 17	204 14		81 $\frac{1}{2}$	29,95	E. N. E. Gentle breezes, and fine weather. Many turtle, and birds.
	13 14 12	203 3		79 $\frac{3}{4}$	30,04	N. E. b. E. Fresh breeze, and fair weather.
	14 15 58	202 8		79 $\frac{1}{2}$	29,95	Ditto. A fresh gale, and some showers.
	15 17 40	201 29		78	30,00	E. N. E. Ditto, ditto.
	16 19 0 $\frac{1}{2}$	200 58		79 $\frac{1}{2}$	30,19	N. E. b. E. A fresh gale, with some rain.
	17 20 25	200 38		78	30,03	E. N. E. A fresh gale.
	18 21 12 $\frac{1}{2}$	200 41		77	30,15	Easterly. A gentle gale, and fair weather. Two islands seen one bearing N. E. $\frac{1}{2}$ E. and the other N. b. W. $\frac{1}{4}$ W.
	19 21 50 $\frac{1}{2}$	200 39		79	30,21	Variable. Light airs, and fine weather. the extremes of the second island N. 7° W. and N. 81° $\frac{1}{2}$ W. Off shore about two leagues.

T A B L E VIII.

Route of the Resolution and Discovery from Sandwich Isles to King George's or Nootka Sound, on the West Coast of America.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1778. Feb.	2 21 56 $\frac{1}{2}$	199 30	0	77 $\frac{3}{4}$	30,08	Easterly. Fresh breezes, and fair weather.
"	3 23 1	199 37		78	30,13	Ditto. Moderate wind, and some rain.
	4 24 31	199 26	11 21	76	30,19	E. b. N. Fresh breezes; some rain. Passed through the rippling of a current.
	5 26 7 $\frac{1}{2}$	199 44		77 $\frac{1}{2}$	30,27	East. A fresh gale, and fair weather.
	6 27 41 $\frac{1}{2}$	200 19		79	30,29	Easterly. A gentle breeze, and some rain.
	7 28 56	200 6	12 10	72 $\frac{1}{2}$	30,23	Ditto. Moderate wind, and some showers.
	8 30 18	201 3		72 $\frac{1}{2}$	30,26	Ditto. A fresh breeze, and fair weather.
	9 30 59	202 5	13 59	73 $\frac{1}{2}$	30,27	S. S. E. A light breeze, and drizzling rain. Saw a grampus.
	10 31 21 $\frac{3}{4}$	203 14		63	30,31	Variable. Moderate wind, and showers.
	11 30 58	205 22		58	30,51	Northerly. Brisk wind. Cold, and cloudy weather.
	12 30 13	206 19		59	30,52	N. N. E. Fresh gales, and cloudy, with showers.
	13 31 21	206 0		59 $\frac{1}{2}$	30,51	E. N. E. Moderate wind, and dark gloomy weather.
	14 31 35	205 59	11 4	62 $\frac{1}{2}$	30,46	N. E. Light breezes, and cloudy weather.
	15 32 29	205 24		59	30,45	N. E. b. E. Light breezes, and some showers. Some birds.
	16 33 47	205 24		57	30,46	Easterly. Moderate wind, and cloudy.
	17 34 56	205 24		58	30,46	Ditto. Light winds, and cloudy.
	18 36 23	205 59	13 6	55 $\frac{1}{2}$	30,58	E. N. E. Moderate wind, and cloudy.
	19 37 25 $\frac{1}{2}$	206 16	16 41	56 $\frac{3}{4}$	30,59	E. S. E. Moderate wind, and some showers.
	20 38 7 $\frac{1}{4}$	207 31	17 2	56 $\frac{3}{4}$	30,48	Southerly. Light winds, and fine weather.
	21 39 6	209 41	17 36	55 $\frac{1}{2}$	30,35	Ditto. Gentle breezes, and cloudy.
	22 40 18 $\frac{1}{4}$	212 14	18 59	56	30,20	S. S. E. Fresh gales, and fine weather.
	23 41 6 $\frac{1}{2}$	214 59		53	30,35	Ditto. Gentle gale, and clear weather. A strong dew.
	24 41 44 $\frac{1}{2}$	217 10		54	30,37	Ditto. Gentle gale, and hazy.

TABLE VIII. Continued.

Route of the Resolution and Discovery from Sandwich Isles to King George's or Nootka Sound, on the West Coast of America.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1778.	°	°	°	°	Inches.	
Feb. 25	42 31 $\frac{3}{4}$	219 21		56 $\frac{1}{2}$	30,28	{ S. E. b. S. Moderate wind, and hazy. Passed a log of wood.
26	43 17	222 16	20 33	51 $\frac{1}{2}$	30,31	{ S. S. E. Fresh breeze, and cloudy.
27	43 48	224 55		49	30,29	{ S. E. b. S. Fresh breeze, and cloudy. Passed more wood.
28	44 17 $\frac{1}{2}$	226 22		49 $\frac{1}{2}$	30,15	{ Ditto. Gentle breezes, and cloudy weather.
March 1	44 49	228 2	20 17	51 $\frac{1}{2}$	30,21	{ S. E. b. E. Moderate breeze, and cloudy.
2	44 54	228 14	18 49 $\frac{1}{2}$	49 $\frac{1}{2}$	30,33	{ Variable. Light airs, and cloudy.
3	44 32 $\frac{1}{2}$	229 7		44 $\frac{1}{2}$	30,34	{ N. N. E. Gentle breeze, and cloudy.
4	44 5	231 8		46 $\frac{1}{2}$	30,00	{ North. A fresh gale, and flying clouds.
5	43 45	232 45	17 32 $\frac{1}{2}$	50	29,86	{ Northerly. Moderate wind, and flying clouds.
6	44 10	234 20		48 $\frac{3}{4}$	29,98	{ N. W. Light airs, and hazy. Saw whales, seals, and drift-wood.
7	44 33 $\frac{1}{2}$	235 28		47 $\frac{1}{2}$	30,27	{ Northerly. Light airs, and fair weather. Saw the coast of America from N. N. E. to S. E. $\frac{1}{2}$ E. about eight leagues off.
8	44 27 $\frac{1}{2}$	235 21	17 43	43 $\frac{1}{2}$	30,17	{ Westerly. Squally, with rain at times.
9	43 55	234 44		44 $\frac{1}{2}$	30,12	{ W. N. W. Squally, with hail and rain at times.
10	43 40	234 47		42 $\frac{1}{2}$	29,91	{ W. N. W. Very unfettled weather. Hail, rain, and fleet.
11	43 44	235 21		38 $\frac{1}{2}$	29,70	{ N. W. Unfettled weather. Hail, rain, &c.
12	43 6	235 0		38	29,86	{ Westerly. Very strong gales, with hail, rain, and fleet.
13	42 47	233 27		40	30,16	{ N. N. W. Fresh gales, and cloudy. Snow and fleet.
14	43 17	233 43		41 $\frac{1}{2}$	29,86	{ Westerly. Squally weather. Hail, rain, and fleet.
15	42 46 $\frac{1}{2}$	231 45		46	30,04	{ N. W. b. N. Strong gales of wind, with squalls of snow and fleet.
16	43 4	232 45		47	30,00	{ N. W. Moderate wind; some rain.
17	43 56	233 52		46 $\frac{1}{2}$	30,22	{ W. N. W. Moderate wind; some rain.
18	44 50	234 8		46 $\frac{1}{2}$	30,07	{ Westerly. Moderate wind; some rain.

TABLE VIII. Continued.

Route of the Resolution and Discovery from Sandwich Isles to King George's or Nootka Sound, on the West Coast of America.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1778.	°	°	°	°	Inches.	
March 19	44 56	233 58	17 52	46 $\frac{1}{4}$	30,31	{ Variable. Light winds, and mostly cloudy.
20	45 30 $\frac{1}{2}$	234 6		49 $\frac{1}{2}$	30,17	{ Ditto. Light winds, and fair weather.
21	45 51	234 8		45 $\frac{1}{2}$	30,02	{ Ditto. Light winds, and cloudy; some rain.
22	47 23	235 5		44 $\frac{1}{4}$	30,00	{ Ditto. Moderate wind, mostly cloudy; some rain. Saw the land from N. b. W. to E. b. S.
23	47 56	234 17	16 41 $\frac{1}{2}$	45	29,85	{ Westerly. Strong gales, and unsettled weather.
24	47 41	234 7		43	30,17	{ Ditto. Fresh gales, and rather unsettled weather.
25	48 30	232 41		45	29,63	{ Variable. Fresh gales, and squally, with fleet at times.
26	48 21 $\frac{3}{4}$	232 28		45	29,91	{ N. Westerly. Fresh gales, and squally; hail, rain, and fleet.
27	47 56	231 24	19 27	45	30,12	{ Ditto. Light winds, and cloudy weather.
28	48 56	232 12		49	30,15	{ Westerly. Fresh gales, and cloudy.
29	49 29 $\frac{1}{2}$	233 26 $\frac{1}{2}$		46 $\frac{1}{2}$	30,10	{ Ditto. Light breezes, and fair weather.
30	49 36	233 18		45 $\frac{1}{2}$	30,21	{ N. W. b. W. Light airs, and fine weather.

TABLE IX.

Route of the Resolution and Discovery from King George's or Nootka Sound to Prince William's, along the Western coast of America.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1778.	°	°	°	°	Inches.	
April 27	49 39	231 31		51	29,40	Easterly. Strong gales, and thick weather.
28	50 1	229 26		53	29,54	S. Easterly. Heavy squalls, and showery weather.
29	51 54	226 54		44 $\frac{1}{2}$	29,38	Ditto. Squally, with rain at times.
30	53 22 $\frac{1}{2}$	225 14	21 12	45 $\frac{1}{2}$	29,40	Southerly. Fresh gales, rain at times.
May 1	54 43	224 44	24 19	44	29,62	S. Easterly. Gentle gales, with showers.
2	56 50	224 6		43 $\frac{1}{2}$	30,08	E. S. E. Fresh gales; squally with rain.
3	58 17	222 14		46	29,94	Variable. Fresh gales, flying clouds, and some rain.
4	58 22	220 45	24 11	53	29,96	N. W. Light airs, and fine weather.
5	58 40	220 58	26 11	48 $\frac{1}{2}$	30,16	W. N. W. Light breezes, and fair weather.
6	59 8	220 19	23 10	47	30,04	Variable. Light airs, and pleasant weather.
7	59 27 $\frac{1}{2}$	219 7	24 26	52 $\frac{1}{4}$	29,96	Northerly. Light airs, and clear weather.
8	59 11	217 41		51 $\frac{1}{2}$	29,88	Variable. Light breezes, and clear weather.
9	59 31 $\frac{1}{2}$	217 0	22 47	52 $\frac{1}{2}$	29,86	Ditto. Light airs, and fine weather.
10	59 51	215 56 $\frac{1}{2}$		55 $\frac{3}{4}$	29,58	Ditto. Light breezes, and fine clear weather.
11	59 33 $\frac{1}{2}$	215 21	27 35	55 $\frac{3}{4}$	29,60	Ditto. Light breezes, and fine weather.
12	61 11 $\frac{1}{2}$	213 28		48	29,52	Easterly. Light breezes, and cloudy.
13	60 49	213 7		45	29,92	Ditto. Fresh breezes, and gloomy weather.
14	60 19	213 7		49	29,80	S. Easterly. Fresh gales, and thick foggy weather, with rain. At anchor in Prince William's Sound.

TABLE X.

Route of the Resolution and Discovery from Prince William's Sound to Cook's River, along the Western Coast of America.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1778.	°	°	°	°	Inches.	
May 18	60 30	212 21 $\frac{1}{2}$		50	29,71	{ N. W. A gentle breeze, and clear weather.
19	60 3	212 12	23 37	46 $\frac{1}{2}$	29,67	{ Variable. Light breezes and fair weather.
20	60 0	211 40		41	29,72	Ditto. Light airs, and thick weather.
21	59 30 $\frac{1}{3}$	210 6	23 42	41 $\frac{3}{4}$	29,92	Ditto. Moderate wind, and fair weather.
22	58 22	208 42		41 $\frac{3}{4}$	30,12	Westerly. Fresh gales, and fair weather.
23	59 9	208 47		44	30,25	Ditto. Fresh gales, and fair weather.
24	58 14 $\frac{1}{4}$	207 59		41	30,17	Ditto. Light breezes, and fair weather.
25	58 41 $\frac{1}{2}$	207 39		44 $\frac{1}{2}$	30,18	Northerly. Fresh gales.
26	59 9 $\frac{1}{2}$	206 50		44	29,92	Variable. Fresh gales.
27	59 20	207 20		44	29,75	{ N. W. Strong gales, and thick hazy weather, with rain.
28	59 50 $\frac{3}{4}$	207 24		46 $\frac{3}{4}$	30,17	{ Easterly. Light breezes, and hazy weather.
29	60 8	207 36		42	29,98	Variable. Fresh gales, and drizzling rain.
30	60 37	208 3		46 $\frac{3}{4}$	29,77	Northerly. Light winds.
31	61 11	208 45		46	29,72	Ditto. Light winds, and drizzling rain.
June 1	61 5 $\frac{1}{3}$	209 24		47	29,57	{ Calm, with fair weather, and drizzling rain alternately.

TABLE XI.

Route of the Resolution and Discovery from Cook's River to Samganoodha Harbour, in the Island Oonalashka.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1778.					Inches.	
June 7	58° 5'	207° 45'	0	47½	30,32	Variable. Light winds, and cloudy.
8	57° 52½'	207° 54'		50	30,23	Ditto. Fresh breezes, and fair weather.
9	57° 42'	207° 39'		46	30,17	S. E. b. S. Moderate wind, and drizzling rain.
10	57° 20'	207° 25'		46	30,11	S. E. b. S. A gentle breeze, and misty weather.
11	57° 5'	207° 33'		45	29,97	S. E. Moderate wind, drizzling rain, and thick foggy weather.
12	57° 3½'	206° 12'		48½	30,11	Southerly. Moderate breeze, and foggy, with drizzling rain.
13	56° 49'	205° 40'	20 31	49¾	30,02	W. S. W. Fresh breezes, and hazy weather.
14	56° 22¼'	205° 27'		49½	29,98	Ditto. Fresh breezes, and close cloudy weather.
15	56° 23'	202° 51'		45	29,50	Southerly. Fresh gales, and foggy; rain at times.
16	56° 5'	201° 10'		44	29,91	Variable. Fresh gales, and foggy, rain at times.
17	55° 33'	200° 48'	20 22	44½	30,07	Westerly. Light winds, and clear weather.
18	55° 25'	200° 42'	22 32	47	30,06	Variable. Light winds, and fine weather.
19	55° 18'	199° 16'		47	29,85	Ditto. Light winds, and fine weather.
20	54° 44'	197° 29'		48	29,81	N. E. Light breezes, and fair weather.
21	54° 17½'	197° 11'		50	29,72	N. W. b. N. Light breezes, and fair weather.
22	53° 51'	196° 34'		53	29,68	Westerly. Light airs, and fine weather.
23	53° 36½'	195° 50'		50	29,52	Variable. Light winds, and hazy; some rain.
24	54° 13'	195° 14'		42	29,80	W. S. W. A fresh gale, and cloudy; some rain.
25	54° 4'	194° 59'		47	29,75	Variable. Light winds, and hazy weather.
26	53° 46'	194° 1'		45	29,80	Easterly. Light winds, and thick foggy weather.
27	53° 51½'	193° 35'		46	29,80	S. S. E. Fresh gales, and foggy.
28	53° 55'	193° 28'		43½	29,70	Northerly. Light breezes. Came to an anchor off Samganoodha Bay.

TABLE XII.

Route of the Resolution and Discovery from Samganoodeha Bay to Bristol Bay, along the Western Coast of America.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
					Inches.	
July 1778.						
2	54 19	193 33		47	30,24	E. S. E. Light airs, and fine weather.
3	55 12	195 24		46	29,78	Easterly. Moderate wind; and foggy.
4	55 49 $\frac{1}{2}$	197 5		44	29,67	Southerly. Moderate wind, and thick weather.
5	56 30	198 43		42 $\frac{3}{4}$	29,68	Easterly. The same weather.
6	56 55	199 36		42	29,73	Variable. Light winds, and foggy, with rain.
7	57 6 $\frac{1}{2}$	200 16		50	30,01	Northerly. Light winds, and hazy.
8	57 16	200 48	26 13	47	29,98	Variable. Light winds, and fine weather.
9	57 49 $\frac{1}{2}$	201 42		44	30,13	Ditto. Light winds, and fine weather.
10	58 18 $\frac{3}{4}$	200 39	22 49	51	30,11	Ditto. A gentle breeze, and fair weather.
11	58 0	200 34		48	30,16	Southerly. Light winds, and foggy, with drizzling rain.
12	58 12 $\frac{1}{4}$	200 33	22 32	51	30,10	Variable. Light winds, and hazy; thunder and lightning.
13	58 13 $\frac{1}{2}$	199 0		50	30,17	Westerly. Light winds, and fine weather.
14	58 12	198 56		52	30,10	Westerly. Light airs, and fine weather.
15	58 22	198 39		52	30,17	Ditto. Light airs, and fine weather.
16	58 28	197 46		52 $\frac{1}{2}$	30,28	Ditto. Light winds, and foggy at times.
17	58 54	197 25		55	30,30	Variable. Light airs, and fine weather.
18	59 17	197 36		54	30,17	Ditto. The same weather.
19	59 30	197 45		63	29,85	S. W. Light winds, and fair weather. At anchor off Cape Newnham.

TABLE XIII.

Route of the Resolution and Discovery from Bristol Bay to Norton Sound, on the Western Coast of America.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1778.	°	°	°		Inches.	
July 23	58 43	196 45		53	29,73	Easterly. Moderate wind, and cloudy. Cape Newnham N. 39° E. distant about ten leagues.
24	58 7	194 22		49 $\frac{3}{4}$	29,65	E. N. E. Moderate wind, and misty weather.
25	58 25 $\frac{1}{2}$	192 13		50 $\frac{1}{2}$	29,68	Northerly. Moderate wind, and thick fog.
26	58 37	191 36		53	29,86	N. Easterly. Little wind, and thick fog. Many whales, and birds.
27	59 11	190 57		51	29,84	Northerly. Little wind, and foggy. Many birds, and seals.
28	59 55	190 0	18 40	54	29,77	N. Easterly. Light winds, and foggy weather.
29	60 21	187 35		48	29,54	Northerly. Light winds, and foggy, with rain. Many birds.
30	60 21	188 11		55	29,64	Ditto. Light winds, and mostly foggy.
31	61 11	189 22		46	29,58	Variable. Little wind, and foggy weather.
Aug. 1	61 57 $\frac{1}{2}$	190 47		54	29,83	Easterly. Light winds, and cloudy: some rain.
2	61 55	191 44		49 $\frac{1}{2}$	29,77	Variable. Light winds, and cloudy, with rain.
3	62 34	192 20		55	30,01	Ditto. Light breezes, and cloudy: some rain.
4	63 53	194 0		52	30,00	Easterly. Moderate wind, with rain.
5	64 30	193 48		50 $\frac{1}{2}$	29,76	Variable. Moderate wind, and foggy, with rain.
6	64 39	193 1		56	29,75	Southerly. Moderate breeze, and foggy, with rain.
7	64 48	192 42		49	29,85	Westerly. Little wind, and thick misty weather.
8	65 0	192 30		48	29,70	Variable. Little wind, and foggy, with rain.
9	65 48	191 42		50	29,70	N. Easterly. Fresh breeze, and foggy: some rain.

TABLE XIII. Continued.

Route of the Resolution and Discovery from Bristol Bay to Norton Sound, on the Western Coast of America.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1778.	°	°	°	°	Inches.	
Aug. 10	65 36	189 15	27 22	45	30,06	Northerly. Fresh gales, and fair weather.
11	66 5 $\frac{1}{4}$	191 19		46	29,94	Southerly. Light winds, and fine weather.
12	66 20 $\frac{1}{2}$	191 6	30 41	51	29,97	Variable. Light winds, and fair weather.
13	66 32 $\frac{1}{2}$	192 0	27 15 $\frac{1}{2}$	50	30,10	Northerly. Light breezes, and fine weather.
14	67 28	194 33		45 $\frac{1}{2}$	30,18	S. Easterly. A fresh breeze, and hazy; some rain.
15	68 18	193 1		48	29,79	Southerly. Fresh gales, and foggy, with rain.
16	69 57	193 41	35 32	42	29,85	Ditto. Fresh gales, and hazy weather.
17	70 33	197 35	35 1	35	30,10	Westerly. Moderate wind, and hazy weather.
18	70 44	198 24		33 $\frac{1}{4}$	30,02	Ditto. Fresh gales, and foggy; with snow and fleet.
19	70 6	196 32		33 $\frac{1}{2}$	30,07	Ditto. Fresh gales, and hazy; with snow and fleet.
20	70 4	196 0		38 $\frac{1}{2}$	29,99	Ditto. Fresh breezes, and foggy weather.
21	69 32	195 48	31 3	42	29,76	Northerly. Light winds, and thick fog.
22	69 34	194 42		44	29,73	Variable. Light breezes, and foggy weather.
23	69 33 $\frac{1}{2}$	194 20		44	29,57	Ditto. Light breezes, and thick fog.
24	69 30	190 23		35	30,10	N. Westerly. Moderate wind, and foggy; some snow.
25	69 38	187 30	21 44	40	29,80	Westerly. Fresh gales, with showers of snow and rain.
26	69 36	184 0	23 20	37 $\frac{1}{2}$	29,96	Ditto. Fresh breezes, and cold raw weather.
27	69 33 $\frac{1}{2}$	183 30		41 $\frac{3}{4}$	29,66	Variable. Fresh gales, and cloudy; cold, and some rain.
28	69 17	182 40	25 56	35 $\frac{1}{2}$	29,96	Ditto. Light winds, and misty weather; some rain.

T A B L E XIII. Continued.

Route of the Resolution and Discovery from Bristol Bay to Norton Sound, on the Western Coast of America.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1778.	°	°	°	°		
Aug. 29	68 49	181 26		37	29,89	{ Variable. Fresh breezes; hazy; some rain.
30	68 31 $\frac{1}{2}$	182 32		33	30,10	{ N. Westerly. Fresh breezes, and foggy; with much snow.
31	68 6	185 39		35	30,21	{ N. W. b. N. Moderate wind, and hazy; some snow.
Sept. 1	67 30	187 15		35	30,20	{ North. Moderate wind, with snow and fleet.
2	66 37 $\frac{1}{2}$	189 20	27 57 $\frac{1}{2}$	34	30,07	{ N. N. W. Light winds, and much snow.
3	65 28	189 5		44	29,97	{ N. N. W. Moderate wind; showers of snow.
4	64 38 $\frac{1}{2}$	188 15	24 53	39	29,76	{ Northerly. Light winds, and fine weather.
5	64 8	189 57		39 $\frac{1}{4}$	29,84	{ N. N. W. Light winds; the air dry and cold.
6	63 55 $\frac{1}{2}$	193 30	26 53	43	29,66	{ N. N. W. Light winds, and fair weather.
7	64 16	194 20	25 59	46	29,84	{ Variable. Light airs, and fine weather.
8	64 27	196 3		45 $\frac{1}{2}$	30,00	{ Westerly. The same weather.
9	64 34 $\frac{1}{2}$	197 41		46 $\frac{1}{2}$	29,90	{ S. Westerly. Fresh breezes, and foggy; some rain.
10	64 33	197 30		41	29,97	{ Westerly. Light winds, and cloudy. In Norton Sound.

T A B L E XIV.

Route of the Resolution and Discovery from Norton Sound to the
Island of Oonalashka.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1778.						
Sept. 17	64 10	198 30	0	46 $\frac{1}{2}$	29,78	Easterly. Light winds, and fair weather.
18	63 37	197 45		42 $\frac{1}{2}$	29,90	Ditto. Light winds, and fine weather.
19	63 43	196 12		49	29,97	Variable. Moderate wind, and fair weather.
20	63 37	192 12	22 23	38	29,73	N. Easterly. Fresh gales, and passing clouds.
21	62 58	190 17		39	29,67	Northerly. Fresh gales, with showers of snow.
22	61 45	189 0		39	29,74	N. Westerly. Gentle gales, with showers of snow.
23	60 21 $\frac{1}{2}$	187 30		40	29,95	N. W. A fresh breeze, and cloudy cold weather.
24	59 17 $\frac{1}{4}$	189 5		40	30,25	Variable. Moderate wind, and dry cloudy weather.
25	58 31	190 51		44	30,00	Southerly. Strong gales, and cloudy, but mild weather.
26	58 36 $\frac{1}{2}$	189 15		44 $\frac{1}{2}$	29,30	S. S. E. Fresh gales, and hazy weather; some rain.
27	58 36	189 43		45 $\frac{1}{4}$	29,25	S. S. E. Moderate wind, and cloudy: some rain.
28	58 2	190 28		49	29,41	Southerly. Light winds, and mostly fair weather.
29	57 0	192 12		50	29,69	S. W. Fresh gales, with showers of sleet and rain.
30	56 30	192 50		50	29,75	Variable. Light winds, and some showers. Many whales.
Oct. 1	55 29	193 0		47	29,77	S. Westerly. Light airs, and some showers.
2	54 2 $\frac{1}{2}$	192 27		45	30,14	Westerly. Light airs, and showery weather.
3	53 59		19 59	47	30,47	Westerly. Light breezes. Standing into Samganoodha harbour, in the island of Oonalashka.

T A B L E XV.

Route of the Resolution and Discovery from Oonalashka to Sandwich Isles.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1778. Oct. 27	54 8	°	19 59	43½	30,01	Variable. Strong gales, with rain.
28	53 59			44	29,60	S. Westerly. Strong gales, with hail and rain.
29	53 52½	191 41		39	30,05	Variable. Very strong gales, with hail and rain.
30	53 45			38	29,50	West. Strong gales, with showers of snow and rain.
31	52 1½	194 56		39	30,40	West. Strong gales in squalls, with snow and fleet.
Nov. 1	49 55	196 2		41	30,11	Westerly. Strong gales, with hail, snow, and fleet.
2	48 31	197 10		46	29,95	Ditto. Fresh gales, with thick rainy weather.
3	48 1	198 28		43	29,50	Southerly. Strong gales, with rain.
4	45 44½	199 51		46	29,92	W. b. S. Strong gales, with showers of hail.
5	44 31	200 36		49	29,40	Variable. Fresh gales, and rainy weather.
6	42 29½	201 27	17 15	50	30,23	N. W. Moderate wind, and foggy weather.
7	41 10	202 2		55	30,25	S. W. Light winds, and some rain. Saw a shagg.
8	40 38	202 17	16 5	59	30,21	Westerly. Light winds, and cloudy.
9	39 36	202 36		58	30,17	North. Light winds, with rain.
10	39 10	203 16		64	30,36	Variable. Light winds, with flying clouds.
11	38 38	205 0		65	30,48	South. Moderate wind, and mostly cloudy.
12	38 14	206 17		67	30,31	South. Moderate wind, and mostly cloudy.
13	36 6	206 33		62	30,33	Westerly. Fresh gale, and hazy, with some rain.
14	34 39	206 46		63	30,43	N. b. E. Light winds, and cloudy weather.
15	33 33	206 57		69	30,40	E. N. E. Light winds, and mostly cloudy.

T A B L E XV. Continued.

Route of the Resolution and Discovery from Oonalashka to Sandwich Isles.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1778.	°	°	°	°	Inches.	
Nov. 16	32 47	206 57	11 57	69	30,35	{ N. Easterly. Light winds, and cloudy. Several dolphins.
17	32 26	206 51		76	30,45	{ Easterly. Light winds, and fine weather.
18	32 41	207 52		74	30,32	{ S. S. E. Moderate wind, and fine weather.
19	32 27	206 44		71	30,15	{ Southerly. Moderate wind, and cloudy.
20	30 23	205 51		65	30,17	{ Variable. Strong gales, with rain.
21	27 53	206 28		67	30,21	{ Northerly. Strong wind, and showery weather.
22	26 17 $\frac{1}{2}$	206 25		68 $\frac{3}{4}$	30,31	{ North. Light winds, with showers.
23	24 49	206 0		72 $\frac{1}{2}$	30,30	{ Northerly. Light winds, and fine weather.
24	22 36	205 30		78	30,26	{ E. N. E. A fresh breeze, and fine weather.
25	20 57 $\frac{1}{2}$	204 38		81 $\frac{1}{2}$	30,22	{ Easterly. Fresh gales with showers.
26	20 57	203 28		81 $\frac{1}{2}$	30,16	{ Ditto. Fresh breeze, and fine weather. Sandwich Isles, from E. by the S. to W.

T A B L E XVI.

Route of the Resolution and Discovery from Sandwich Isles to the Bay of St. Peter and Paul in Kamtschatka.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1779.	°	°	°	°	Inches.	
March 15	21 47	199 37		75	30,15	{ Oneeheow, from N. E. $\frac{1}{2}$ E. to East; and Tahoorā, S. W. b. W. about three leagues distant.
16	21 27	198 50		74	30,17	{ Easterly. Moderate breezes, and cloudy.
17	21 18	197 2		75 $\frac{1}{2}$	30,20	{ E. N. E. Fresh breezes, and fair weather.
18	21 12	195 26	10 4	77	30,21	{ N. E. b. E. Moderate wind, and fair weather.
19	21 11	194 28	9 10	74 $\frac{1}{2}$	30,16	{ N. Easterly. Moderate wind, and fair. Many boobies.
20	20 52	193 22	11 30 $\frac{1}{3}$	75 $\frac{1}{2}$	30,12	{ N. N. E. Light wind, and fair weather. Many sharks.

T A B L E XVI. Continued.

Route of the Resolution and Discovery from Sandwich Isles to the Bay of St. Peter and Paul, in Kamtschatka.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1779.	°	°	°	°	Inches.	
March 21	20 37	192 13	11 26	77	30,21	{ E. N. E. Moderate wind, and fair weather. Several bonetos about.
22	20 27	190 44		77	30,23	{ E. b. N. Moderate wind, with some rain.
23	19 58	188 22	11 51	78	30,24	{ N. E. b. E. Fresh breezes, with rain.
24	19 56	186 0		81	30,21	{ E. N. E. Moderate wind, and some rain.
25	19 58	184 12	11 14	83 $\frac{1}{2}$	30,18	{ Easterly. Moderate wind, and fair weather. Several men-of-war birds.
26	19 48	183 9		73	30,16	{ Easterly. Light winds, and fair weather. The birds remain with us.
27	19 49 $\frac{1}{2}$	182 29	12 8	84 $\frac{1}{2}$	30,10	{ East. Light winds, and fine weather.
28	20 6	181 23		85 $\frac{1}{2}$	30,06	{ E. N. E. Light winds, and fine weather. Many men-of-war birds.
29	20 16	180 59		83	30,00	{ Easterly. Light winds, and fine weather. Boobies, and men-of-war birds.
30	20 21	180 25		78	30,00	{ Southerly. Light winds, and some rain. Porpoises, dolphins, and birds.
31	20 35	179 47		80 $\frac{1}{2}$	30,07	{ Southerly. Light airs, and hot sultry weather.
April 1	21 14	179 31	11 21 $\frac{1}{2}$	79	30,10	{ Easterly. Light winds, and cloudy. Dolphins, and men-of-war birds.
2	22 36	177 20		76	30,20	{ N. Easterly Fresh gales, and squally weather. Passed a turtle.
3	24 38 $\frac{1}{2}$	175 21		75 $\frac{1}{2}$	30,21	{ N. Easterly. Fresh gales, and cloudy.
4	26 21	173 36		73	30,30	{ E. N. E. Fresh gales, and hazy, with rain; some lightning.
5	28 33	171 47		71	30,12	{ Easterly. Fresh gales, and hazy, with rain.
6	30 13	170 13		69	29,98	{ Variable. Fresh gales, with rain.
7	30 6 $\frac{1}{2}$	168 15		59	30,24	{ N. b. W. Fresh gales, and squally, with rain. Saw an albatrois.
8	30 39	167 4	9 9	62	30,46	{ N. Easterly. Fresh breezes, and cloudy; some rain.
9	32 16	166 39		67	30,42	{ S. Easterly. Moderate wind, and fair weather.
10	33 30 $\frac{1}{2}$	166 0		63	30,42	{ Variable. Light winds, and cloudy some rain.

TABLE XVI. Continued.

Route of the Resolution and Discovery from Sandwich Isles to the Bay of St. Peter and Paul, in Kamtschatka.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1779.	°	°	°	°	Inches.	
April 11	35 32	165 30		62	29,94	Southerly. Fresh breezes, and squally; some rain.
12	37 10	164 34		50	30,42	Variable. Fresh gales, and hazy; some rain. Birds.
13	39 30	163 20		49	30,33	Easterly. Fresh gales, and hazy, with rain. Some divers.
14	40 53	162 13		45	29,94	E. N. E. Strong wind, with rain and hail.
15	41 52	160 42		42	30,30	N. Easterly. Strong gales, and cloudy.
16	42 12 $\frac{1}{2}$	159 41	6 20	41	30,36	Northerly. Light winds, and cloudy weather.
17	43 18	160 0		41	30,31	Northerly. Moderate wind, and cloudy weather.
18	46 9	160 48		37	29,67	Variable. Fresh gales, with rain.
19	48 40	161 14		31 $\frac{1}{2}$	29,80	Southerly. Fresh gales, with snow.
20	49 48	161 30	9 33 $\frac{1}{2}$	32	29,83	S. W. Moderate wind, and snow at times.
21	50 25 $\frac{1}{4}$	161 48		36	30,05	Northerly. Moderate wind, and cloudy, with showers of snow.
22	51 38	160 7		30	30,16	N. Easterly. Fresh breezes, and cloudy.
23	52 11	159 37		30	30,17	N. Easterly. Moderate wind, and foggy. Saw the continent of Asia.
24	52 30	159 40		30	30,13	N. Easterly. Moderate wind, and foggy, with fleet.
25	52 40	159 30		30 $\frac{1}{2}$	30,55	N. E. Fresh gales, and hazy, with fleet
26	52 35	159 43		29 $\frac{3}{4}$	29,90	N. E. Fresh gales, with much snow.
27	52 45	159 43		29 $\frac{3}{4}$	30,20	N. Easterly. Fresh gales, and foggy, with snow.
28	52 45	160 0		34	30,11	N. N. E. Moderate breezes, with fleet. The North point forming the entrance into the bay of St. Peter and Paul, bore N. 49° West, distant about three leagues.

TABLE XVII.

Route of the Resolution and Discovery from the Bay of St. Peter and Paul toward the North, and back to that Place.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1779.	°	°	°	°		
June 17	52 46	159 11	7 59 $\frac{1}{2}$	49 $\frac{1}{2}$	29,74	{ Variable. Light winds, and hazy, with some rain.
18	52 39	159 42	8 59	42 $\frac{1}{2}$	29,92	{ S. E. b. E. Light winds, and foggy weather.
19	53 59	161 17		46	29,95	{ S. S. W. Light winds, and thick foggy weather.
20	54 53 $\frac{1}{2}$	162 48		45	29,97	{ S. b. W. Fresh gales, and foggy weather. Many birds.
21	55 51 $\frac{3}{4}$	163 42		47 $\frac{1}{2}$	30,03	{ Variable. Moderate wind, and hazy weather.
22	56 48	164 45		52	29,75	{ Variable. Moderate wind, and some rain.
23	57 11	165 47		48 $\frac{1}{2}$	30,03	{ Variable. Light winds, and foggy.
24	58 19 $\frac{1}{2}$	167 20	13 11 $\frac{1}{2}$	46 $\frac{1}{2}$	29,92	{ S. S. W. Moderate wind, and foggy at times.
25	59 8	168 16	13 10	50 $\frac{1}{2}$	30,06	{ Southerly. Light winds, and foggy at times.
26	59 27	170 46		44 $\frac{1}{4}$	30,07	{ S. W. b. S. Moderate wind, and very foggy.
27	59 52	175 44	13 30	43	29,96	{ S. W. Fresh gales, and foggy. Many gulls.
28	61 56	176 2	17 19	50 $\frac{1}{4}$	29,60	{ S. W. Moderate wind, and hazy. Birds and drift-wood.
29	62 4	178 24		44 $\frac{1}{2}$	29,43	{ Westerly. Moderate wind, and hazy; some rain.
30	61 49	180 17		41 $\frac{1}{2}$	29,71	{ Ditto. Light breezes, and hazy weather.
July 1	62 10	181 13		44	29,72	{ Variable. Light winds, and foggy; some rain.
2	62 38	182 49		45	29,82	{ Southerly. Light winds, and thick fog.
3	63 35	186 57		44	30,09	{ S. E. Moderate wind, and mostly foggy.
4	64 33	188 51	26 53	42	30,16	{ S. E. Light winds, and foggy, at times.
5	65 42	189 47		42 $\frac{1}{2}$	30,07	{ Southerly. Light airs, and foggy. Many whales and birds.
6	67 0	191 24		40	29,87	{ S. b. E. Moderate wind, and hazy. Met with ice.

T A B L E XVII. Continued.

Route of the Resolution and Discovery from the Bay of St. Peter and Paul toward the North, and back to that Place.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1779.	°	°	°	°		
July 7	68 22	192 18	27 22	37	29,67	Southerly. Moderate wind, and foggy; with rain. Sea-horses.
8	69 25	192 39	21 39	32	29,71	Variable. Light winds, and foggy, with snow and rain.
9	69 11	188 54	29 28	32	29,44	N. b. W. Fresh gales, and hazy, with snow, and cold weather.
10	68 1	188 50		39	29,52	N. W. Light winds, and foggy, with snow.
11	67 51	189 21	27 32	38	29,48	N. Easterly. Light winds and foggy, with snow and fleet.
12	68 41	189 0		37	29,18	Northerly. Light winds, rain and fleet.
13	69 29	188 10	26 10	36	29,78	Variable. Moderate wind, rain and fleet.
14	69 37	189 4		41	29,67	Easterly. Light winds, and foggy, with rain and fleet.
15	69 36	190 17		35	29,55	Variable. Light winds, and thick foggy weather.
16	69 55	193 7		32	29,60	S. Westerly. Strong wind and foggy, with snow and fleet.
17	69 55	195 14	35 37	36	29,50	S. Westerly. Fresh gales, with snow and fleet.
18	70 26	196 18	31 20	37	29,80	Variable. Light winds and foggy, with snow and fleet.
19	70 11	197 4	28 59	37	29,91	Ditto. Light winds, and thick foggy weather.
20	69 37	195 1		41	29,90	Easterly. Moderate wind, and foggy.
21	69 37	193 7		44	29,70	Easterly. Moderate wind, and foggy weather.
22	69 27	188 35		48	29,46	Easterly. Fresh gales, with rain.
23	69 3	187 29		37	29,40	Easterly. Moderate wind, and foggy weather.
24	68 51	188 37		37	29,12	Variable. Moderate wind, and foggy; some rain.
25	68 38	190 2	21 48	35	29,97	S. Westerly. Moderate wind, and foggy.
26	67 59	188 27		39	29,78	Southerly. Fresh gales and cloudy weather.

TABLE XVII. Continued.

Route of the Resolution and Discovery from the Bay of St. Peter and Paul toward the North, and back to that place.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1779.	°	°	°	°	Inches.	
July 27	67 47	188 27		37	29,80	Variable. Light winds, and foggy, with rain.
28	67 9	189 46		43	29,86	Southerly. Moderate wind, and hazy.
29	66 50	190 52		42	29,80	S. Easterly. Moderate wind, and fair weather.
30	66 20	191 20		42	29,60	Variable. Little wind, and thick fog.
31	65 5	189 20	22 52½	42	29,82	Northerly. Moderate wind, and foggy: some rain.
Aug. 1	64 25½	189 45	19 47	40	29,79	Variable. Light winds, and foggy weather.
2	64 1	189 57	24 38	47	29,73	Southerly. Moderate wind and foggy.
3	64 5	189 26		45	29,61	Easterly. Little wind, and hazy weather.
4	64 0	188 11		41	29,57	Southerly. Light winds, and foggy.
5	62 18	186 1		42½	29,46	Northerly. Fresh gales, and hazy, with rain.
6	60 47	184 31		43	29,75	Westerly. Fresh gales, and hazy: some rain.
7	59 35	183 30	18 25	44	30,14	Ditto. Moderate wind, and hazy: some rain.
8	59 5	180 42		45	29,50	Southerly. Fresh gales, and fair weather.
9	58 49	177 4		48	28,95	Southerly. Fresh gales, and foggy: with rain.
10	58 26	174 18		48	28,94	Variable. Moderate wind; some rain.
11	57 25	172 41	11 34	49½	29,15	Westerly. Moderate wind, and hazy; some rain.
12	56 28	171 46	11 11	51	29,40	Ditto. Moderate wind, and cloudy weather.
13	55 23	170 50		50	29,77	Ditto. Moderate wind, and fair weather.
14	54 50	171 26		48	29,93	S. Westerly. Moderate wind, and hazy; some rain.
15	54 10	171 14		48	29,96	Westerly. Moderate wind, and cloudy.
16	54 22	170 40		51	29,84	Ditto. Light winds, and hazy weather.

TABLE XVII. Continued.

Route of the Resolution and Discovery from the Bay of St. Peter and Paul toward the North, and back to that place.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1779. Aug. 17	53 48	168 19	9 55	50	30,02	N. Westerly. Moderate, and fair weather.
18	52 38	167 50		52	30,05	Westerly. Moderate wind, and fair weather.
19	52 38	165 21		49	29,66	Southerly. Fresh gales, and cloudy, with rain.
20	53 7	162 40		52	30,03	Variable. Fresh gales, and cloudy weather.
21	53 45	161 38		57	29,90	S. W. Moderate wind, and hazy weather.
22	53 8	160 36	6 18	57	29,97	Variable. Light winds, and cloudy; some rain.
23	52 46	160 10	6 12	56	29,92	Westerly. Light winds, and cloudy.
24	52 52	158 43 $\frac{1}{2}$	6 20 $\frac{1}{2}$	57	30,13	N. W. b. N. Moderate wind, and fair weather. In the bay of St. Peter and Paul.

TABLE XVIII.

Route of the Resolution and Discovery from the Bay of St. Peter and Paul to Macao in China.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1779. Oct. 10	52 38	158 37	6 20 $\frac{1}{2}$	60	29,78	N. W. b. N. Light winds, and fine weather.
11	52 5	158 30	6 3	47	29,93	Variable. Moderate wind, and cloudy.
12	51 0	157 22	5 17	46	29,86	Northerly. Moderate wind, and cloudy; some rain.
13	49 49	156 47	4 49	42	29,55	Variable. Moderate wind, and fine weather.
14	48 17	155 30		43	29,80	Westerly. Moderate wind, and fine weather.
15	46 31	155 20	5 14	44	30,09	Ditto. Moderate wind, and some showers.

T A B L E XVIII. Continued.

Route of the Resolution and Discovery from the Bay of St. Peter and Paul to Macao in China.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1779.	°	°	°	°	Inches.	
Oct. 16	45 27	155 23	4 39	47	30,15	Westerly. Moderate wind, and fine weather.
17	45 7	153 47	4 54	48	30,14	N. Westerly. Light winds, and fine weather.
18	44 28	152 46		50	30,26	Westerly. Moderate wind, and cloudy; with showers.
19	44 15	150 36		50	29,50	Southerly. Strong gales, and cloudy; some rain.
20	43 47	150 24		49	29,37	Ditto. Moderate wind, and thick hazy weather.
21	42 40	149 20		45	29,92	Variable. Strong gales, with rain.
22	40 59	148 0	2 27	44	30,15	N. Westerly. Fresh gales, and fair weather.
23	40 35	146 39	0 49	51	30,36	Variable. Light winds, and cloudy.
24	40 48	145 30		59	29,96	S. Westerly. Fresh gales, with rain.
25	40 25	144 2		53	30,00	Variable. Fresh gales, and hazy; some rain.
26	40 5	142 25	0 15	62	30,02	Variable. Moderate wind, and fair weather. Saw the coast of Japan.
27	39 16 $\frac{1}{2}$	143 2	1 13	62	30,15	Ditto. Moderate wind, and cloudy. Saw the East coast of Japan.
28	38 15	142 6	1 17	62	30,14	Ditto. Light winds, and cloudy. All day within sight of Japan.
29	37 45	141 50		64 $\frac{1}{2}$	30,11	Southerly. Fresh gales, and hazy; some rain.
30	36 41	142 3	1 20	60	29,93	Variable. Brisk wind, and hazy weather.
31	35 33	142 3		63	30,10	Ditto. Moderate wind, and fair weather.
Nov. 1	35 17	141 29	1 41	69	30,35	Ditto. Moderate wind, and fine weather.
2	35 43	141 15		71	30,29	S. S. E. Fresh breezes, and fair weather.
3	36 29	144 48		73	30,02	S. b. E. Fresh breezes, and cloudy, with rain.
4	35 48 $\frac{1}{2}$	146 33	3 14	75	29,85	S. S. W. Moderate wind, with some lightning and rain.
5	35 15	147 18	2 58 $\frac{1}{2}$	70	29,86	Variable. Light winds, with rain.

T A B L E XVIII. Continued.

Route of the Resolution and Discovery from the Bay of St. Peter and Paul, to Macao in China.

Time.	Latitude North.	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1779.	°	°	°	°	Inches.	
Nov. 6	35 1	147 28	3 59	70	30,18	Variable. Moderate wind, and some showers.
7	33 50	148 40		71	30,19	Ditto. Fresh breezes, and fair weather.
8	33 6	148 45		69	30,14	Ditto. Light winds, and cloudy.
9	31 46	146 15		68½	29,78	Northerly. Light winds, with rain.
10	30 42	145 20		69	29,68	Ditto. Fresh gales, and thick rainy weather.
11	29 7	144 20		70½	29,80	Ditto. Fresh gales, and dark rainy weather.
12	27 36	144 26		70	29,40	N. N. E. Strong gales, and thick rainy weather.
13	25 59	143 27	3 49	72	29,81	N. W. Strong wind, and foggy, with rain.
14	24 36½	142 9	2 49	74	30,05	Northerly. Moderate wind, and fine weather.
15	24 49	141 15	2 57	79	30,18	Ditto. Moderate wind, and fine weather.
16	25 7	139 2	1 49½	81½	30,15	Easterly. Moderate wind, and fine weather.
17	24 45	137 56	2 15	76	30,18	Variable. Moderate wind, and fine weather.
18	23 45	135 36		75	30,31	Northerly. Fresh gales, and cloudy.
19	22 47	133 22		77	30,34	N. E. b. N. Fresh gales, and cloudy, with showers.
20	22 5	131 15	1 0½	77	30,24	E. N. E. Fresh gales, with some showers.
21	21 26	129 3	0 1½	80	30,16	E. N. E. Moderate wind, with showers.
22	20 48	126 39		75½	30,10	N. E. Fresh gales, with rain.
23	21 10	123 38		75	30,04	N. E. Strong gales, and rainy weather.
24	21 29	122 24		74	29,91	N. E. Fresh gales, and much rain.
25	21 35	121 24		73½	29,99	N. N. E. Strong wind, with rain.
26	21 12	120 12	0 0½ E.	73	30,01	N. N. E. Fresh gales, and cloudy; some rain.
27	21 5	118 22		70½	30,08	Northerly. Fresh gales, and hazy; some rain.

T A B L E XVIII. Continued.

Route of the Resolution and Discovery from the Bay of St. Peter and Paul, to Macao in China.

Time.	Latitude North	Longitude East.	Variation East.	Therm.	Barom.	Winds, Weather, and Remarks.
1779.	°	°	°	°	Inches.	
Nov. 28	20 42	116 42		71 $\frac{1}{2}$	30,14	N. N. E. Fresh gales, and cloudy; some rain.
29	21 58	115 54		71	30,15	N. E. Fresh gales, and cloudy.
30	21 57	114 9		69	30,20	N. E. Fresh breezes, and cloudy; some rain.
Dec. 1				67	30,27	N. b. E. Fresh breezes, and cloudy; some rain.
2	22 8	113 43	0 32 W.	66	30,30	Variable. Fresh breezes, and cloudy. At anchor at Macao.

T A B L E XIX.

Route of the Resolution and Discovery from Macao in China to the Cape of Good Hope.

Time.	Latitude North.	Longitude East.	Variation West.	Therm.	Barom.	Winds, Weather, and Remarks.
1780.	°	°	°	°	Inches.	
Jan. 13						The Typa distant three miles. The Grand Ladrone E. distant five or six miles.
14	20 34	113 53		68	30,26	N. Easterly. Moderate wind, and fair weather.
15	18 57	114 3		72	30,23	E. N. E. Moderate wind, and fair weather.
16	16 39	114 5	0 39 $\frac{1}{2}$	69 $\frac{1}{2}$	30,15	N. Easterly. Brisk wind, with some rain.
17	14 39	113 13	1 24 $\frac{1}{2}$	73	30,17	Ditto. Fresh gales, and cloudy; some rain.
18	12 32	112 0		75	30,10	N. E. b. N. Fresh gales, and cloudy; some rain.
19	10 22	109 43		73	30,25	N. N. E. Fresh gales, and squally weather.
20	8 46	106 45		73	30,26	N. E. Fresh gales, and fair weather.

TABLE XIX. Continued.

Route of the Resolution and Discovery from Macao in China to the Cape of Good Hope.

Time.	Latitude North.	Longitude East.	Variation West.	Therm.	Barom.	Winds, Weather, and Remarks.
1780.	°	°	°	°	Inches.	
Jan. 21	8 39	106 30		75	30,19	N. b. W. Fresh breezes, and hazy weather. From this day to the 28th, at anchor at Pulo Condore.
29	6 53	105 35		79	30,10	N. E. b. E. Fresh breezes, and fair weather.
30	5 2	104 45		78	30,10	N. E. Moderate wind, and cloudy weather.
31	3 18	104 29	0 30	78	30,07	N. E. b. N. Moderate breezes, and fine weather.
Feb. 1	1 21	105 15	0 26½ E.	78½	30,05	N. b. E. Fresh breezes, and clear weather.
2	0 25 S.	105 15		80	30,09	North. Light winds, and clear.
3	1 48	105 3		81	30,07	N. N. E. Light winds, and clear. Lightning, S. W.
4	2 22	105 38		81	30,09	N. Easterly. Light breezes, and fair; some lightning.
5	3 9	106 12		83	30,00	Northerly. Light breezes, and fair weather.
6	4 33	106 15		81	30,00	Northerly. Light breezes, and fair weather.
7	5 21	106 0		81½	29,97	Ditto. Light winds, and cloudy; some lightning.
8	5 38	105 45		78	29,90	Ditto. Light winds; thunder, lightning, and rain. From this time to the 18th, at Prince's Island, in the Straits of Sunda.
19	7 32	105 10		80½	29,96	W. N. W. Light airs, and cloudy.
20	8 30	105 4		82	29,93	N. Westerly. Moderate wind, and cloudy; some rain.
21	9 23	104 48		82½	29,90	Westerly. Light airs, and hazy.
22	10 31	104 24		82½	29,89	W. N. W. Moderate wind, and cloudy, with showers.
23	11 47	103 46		80	29,90	Northerly. Moderate wind, and cloudy, with rain.
24	13 5	103 10		82	29,86	Variable. Fresh gales, with rain.

T A B L E XIX. Continued.

Route of the Resolution and Discovery from Macao in China to the
Cape of Good Hope.

Time.	Latitude South.	Longitude East.	Variation West.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1780. Feb. 25	13 24	101 31	0	79	30,07	Variable. Fresh gales, with much rain.
26	13 35	100 0		78	30,01	Southerly. Moderate wind, and cloudy weather.
27	13 57	99 20		81	29,98	S. Easterly. Light airs, and pleasant weather.
28	14 56	97 43		79	30,15	Ditto. Moderate wind, and cloudy, with showers.
29	15 53	94 50	2 47	79	30,12	S. S. E. Moderate wind, and cloudy, with showers.
March 1	16 52	92 11		79	30,10	S. E. A fresh gale, and clear weather.
2	17 12	89 35		78	30,19	S. E. b. E. A fresh gale, and fair weather.
3	17 59	87 33		79	30,21	Easterly. Moderate wind, and fine weather.
4	18 25	84 24	3 11	78 $\frac{1}{2}$	30,16	S. E. Moderate wind; some rain.
5	19 2	83 12		78	30,17	S. Easterly. Fresh gale, and fair weather.
6	19 14	81 11		79	30,15	E. S. E. Moderate wind, and mostly rainy.
7	19 40	78 49		78 $\frac{1}{2}$	30,15	E. S. E. Fresh breezes, and cloudy; some rain.
8	20 1	76 58		84	30,14	Eaft. Moderate wind, and fair weather.
9	20 23	75 10		81	30,13	E. S. E. Moderate wind; some rain.
10	20 39	73 20		81	30,19	E. S. E. Moderate breezes; some rain.
11	20 49	71 47		82	30,18	S. E. b. E. Fresh breezes, with rain.
12	21 6	69 22	8 57	81	30,17	E. S. E. Fresh breezes, and fine weather.
13	21 28	67 2		80 $\frac{1}{2}$	30,14	E. S. E. Moderate breezes, and fine weather.
14	22 2	64 58		80 $\frac{1}{2}$	30,21	S. E. Brisk wind, with some rain.
15	22 37	62 56		81	30,21	S. E. Moderate wind, and fair weather.
16	23 13	61 28		80	30,31	E. S. E. Moderate wind, and fair weather.
17	24 14	59 53		81	30,22	S. E. b. E. Moderate wind, and cloudy; some rain.

TABLE XIX. Continued.

Route of the Resolution and Discovery from Macao in China to the Cape of Good Hope.

Time.	Latitude South.	Longitude East.	Variation West.	Therm.	Barom.	Winds, Weather, and Remarks.
1780.					Inches.	
March 18	25 9	58 50	19 0	79	30,29	S. E. b. E. Moderate wind, and hazy.
19	26 7	56 40		77	30,25	S. E. b. S. Fresh breezes, and cloudy.
20	26 36	54 48		77	30,22	S. E. Moderate wind, and cloudy.
21	27 19	52 35		77½	30,30	E. S. E. Moderate wind, and fair weather.
22	28 6	49 47		75	30,27	S. b. E. Fresh gales, and cloudy.
23	28 26½	46 30		76	30,19	S. E. Fresh gales, and cloudy; rain at times.
24	29 6	43 40		76	30,36	S. E. b. E. Strong wind, with rain at times.
25	29 39	41 0	21 27½	76	30,25	S. E. Moderate wind, and fine weather.
26	30 26	38 47		75	30,19	S. Easterly. Moderate breezes; some rain.
27	31 3	37 20		77	30,09	Ditto. Moderate wind, and fine weather.
28	31 42	35 19		78	29,86	Variable. Moderate wind; thunder, lightning, and rain.
29	31 24	34 20		76	30,21	Ditto. Light winds; some rain.
30	31 6	33 30		73	30,23	S. Westerly. Moderate wind, and clear weather.
31	31 20	32 10	26 31	74	30,28	Southerly. Light winds, and fair weather.
April 1	32 11	30 37		76	30,27	Easterly. Light winds, and hazy.
2	33 24	28 57		78	30,17	South. Moderate wind, and cloudy.
3	34 24	26 12		76	30,08	East. Moderate wind, and fine weather.
4	35 23	24 4		76	30,14	Variable. Light winds, and hazy; some rain.
5	36 13	22 17		73	30,24	S. S. W. Light winds, and pleasant weather.
6	35 49	21 41		74	30,26	Southerly. Light airs, and clear weather.
7	35 14	20 37		70	29,98	S. W. Light winds, and hazy.
8	34 57	20 21		67	30,00	Westerly. Moderate wind, and hazy; rain at times.

TABLE XIX. Continued.

Route of the Resolution and Discovery from Macao in China to the
Cape of Good Hope.

Time.	Latitude South.	Longitude East.	Variation West.	Therm.	Barom. Inches.	Winds, Weather, and Remarks.
1780.	° /	° /	° /	°		
April 9	35 7	19 50		67	30,05	Southerly. Moderate wind, and cloudy; some rain. Variable. Fresh gales, and squally; some rain. Westerly. Moderate wind, and cloudy. At noon, the Cape of Good Hope N. b. W. and the Table Mountain N. b. E. $\frac{1}{2}$ E.
10	34 31	18 40		69	30,06	
11	34 36	18 20		67	30,25	

A comparative TABLE of NUMERALS, exhibiting the Affinity and Extent of Language, which is found to prevail in all the Islands of the Eastern Sea, and derived from that spoken on the Continent of Asia, in the Country of the Malayes.

[N. B. The Malaye being considered as the root, three specimens of its Numerals stand separate, at the top of the Table. The derivative branches are ranged and numbered, according to the longitudinal situation of the several places, proceeding from Madagascar, the most Western boundary, Eastward to Easter Island. In the instances marked with a Star, liberty has been taken to separate the Article from the Numeral.]

			Malay.		Malay at Sumatra.		Malay.					
			One,	Satu,		Satoo,		Sa.				
			Two,	Dua,		Duo,		Dua.				
			Three,	Tiga,		Teego,		Teega.				
			Four,	Enpat,		Ampat,		Ampat.				
			Five,	Lyma,		Leemo,		Leema.				
			Six,	Nam,		Anam,		Nam, and Anam.				
			Seven,	Toufou,		Toojo,		Toojo.				
			Eight,	De-lappan,		Slappan,		Delapan.				
			Nine,	Sambalan,		Sambilan,		Sambelan.				
			Ten,	Sapola,		Sapooloo,		Sapooloo.				
			Herbert, p. 368.		Marjden, p. 168.		Forster's Observations, p. 284.					
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	XII.	XIII.
Madagascar.	Madagascar.	Madagascar.	Madagascar.	Acheen, in Sumatra.	Lampoon, in Sumatra.	Batta, in Sumatra.	Rejang, in Sumatra.	Princes Island.	Java.	Tagales of Leucania, or Manila.	Pampangus, or Philippine.	Mindanao.
One, Ifce, or Ella -	Efer -	Iffe -	Iffe -	Sah -	Sye -	Sadah -	Do -	Hegie -	Sigi -	Yfa -	Ifa, Metong -	Ifa -
Two, Rooe -	Rooa -	Tone -	Rica -	Dua -	Rowah -	Duo -	Dooy -	Dua -	Lorou -	Dalava, or Dalova -	Ad-dua -	Daua -
Three, Tulloo, or Tailloo -	Talu -	Tello -	Tello -	Tloo -	Tullo -	Toloo -	Tellou -	Tollu -	Tullu -	Tatl, or Ytlo -	At-lo -	Tulu -
Four, Efax, or Efar -	Effutchi -	Effad -	Effats -	Paat -	Ampah -	Opat -	M-pat -	Opat -	Pappat -	Apat -	Apat -	Apat -
Five, Lime, or Leman -	Deeme -	Fruto -	Limi -	Leemung -	Leemah -	Leemah -	Lema -	Limah -	Limo -	Lima -	Lima -	Lima -
Six, One, or Aine -	Eanning -	Woubla -	Ene -	Nam -	Onnam -	Onam -	Noom -	Gunnap -	Nunnam -	Anim -	Anam -	Anom -
Seven, Heitoo, or Petoo -	Fetto -	Sidda -	Titou -	Too-jo -	Peetoo -	Paitoo -	Toojoa -	Tudju -	Petu -	Pito -	Pitu -	Petoo -
Eight, Balloo -	Varlo -	Foulo -	Walou -	D'Lappan -	Ooalloo -	Ooalloa -	De-lupoon -	Delapan -	Wolo -	Valo -	Valo -	Walu -
Nine, Seeva -	Seve -	Malo -	Sivi -	Sakourang -	Seewah -	Seeah -	Sembilan -	Salapan -	Songo -	Siyam -	Siam -	Seaw -
Ten, Foroo, and Fooloo -	Folo -	Nel -	Tourou -	Saploo -	Pooloo -	Sapooloo -	De Pooloo -	Sapoulo -	Sapoulo -	Polo and Pobo -	Apalo -	Sanpooloo -
Parkinson, p. 205.			Sir Joseph Banks, in Hawkefworth, Vol. iii. p. 777.		Marjden, p. 168.		Marjden, p. 168.		Sir Joseph Banks, in Hawkefworth, Vol. iii. p. 777.		Forster's Observations, p. 284.	
XIV.	XV.	XVI.	XVII.	XVIII.	XIX.	XX.	XXI.	XXII.	XXIII.	XXIV.	XXV.	XXVI.
Iste of Savu.	Island of Savu, or Savoo.	Iste of Ceram.	Iste of Moles. 1616.	New Guinea. Anno 1616.	Pappua of New Guinea.	Tierra del Espiritu Santo.	New Caledonia.	New Caledonia.	Malicolo.	Tanna.	Tanna.	New Zealand.
One, Ifce, or Uffe -	Uffe -	O Ecata -	Kaou -	Tika -	Ofer -	They named numerals as five or six, the same as at Annamooka.	*Wag Eeaing -	*Par Ai -	*Tlee Kaee -	*Ret Tee -	*Ree Dee -	Tabi -
Two, Rooe -	Lhua -	O Looa -	Roa -	Roa -	Serou -		Wa Roo -	Par Roo -	E-Ry -	Car Roo -	Ka Roo -	Roa -
Three, Tulloo -	Tullu -	O Toloo -	Toloo -	Tola -	Kior -		Wat Eeen -	Par Ghen -	E-Rei -	Ka Har -	Ka Har -	Torou -
Four, Uppa -	Uppa -	O Patoo -	Wati -	Fatta -	Tiak -		Wat Bacek -	Par Bai -	E-Bats -	Ka Fa -	Kai Phar -	Ha -
Five, Lumee -	Lumme -	O Leema -	Rima -	Lima, or Liman -	Rim -		Wah Nim -	Pa Nim -	E-Reem -	Ka Rirrom -	K' Reerum -	Rema -
Six, Unna -	Unna -	O Loma -	Eno -	Wamma -	Onim -							Ono -
Seven, Petoo -	Pedu -	O Peeto -	Lvijtjou -	Fita -	Tik -							Etu -
Eight, Aroo -	Arru -	O Aloo -	Eldlou -	Wala -	War -							Warou -
Nine, Saio -	Saou -	O Teoo -	Siwa -	Siwa -	Siou -							Iva -
Ten, Singooroo -	Singooroo -	O Pooloo -	Sanga Poulo -	Sanga Foula -	Samfoor -							Anga Hourou -
Parkinson, p. 170.			Lieut. Cook, Hawkef. Vol. iii. p. 703.		Herrera, from Le Maire, p. 82.		Forster's Voyage, p. 402.		Cook, Vol. ii. p. 364.		Forster, p. 284.	
XXVII.	XXVIII.	XXIX.	XXX.	XXXI.	XXXII.	XXXIII.	XXXIV.	XXXV.	XXXVI.	XXXVII.	XXXVIII.	XXXIX.
New Zealand.	New Zealand.	Horn Islands. 1616.	Iste of Cocos. Anno 1616.	Friendly Islands.	Island of Amsterdam.	Sandwich Islands.	Otaheite.	Otaheite.	Marquisas.	Marquisas.	Easter Island.	Easter Island.
One, Ka Tah -	Tahai -	Tacij, or 'Taci -	Taci -	A Tahaw -	Tahac -		Tohe -	*A Tahay -	*A Tahac -	Bo Dahai -	Kat Tahac -	Ko Tahai -
Two, Ka Rooa -	Rooa -	Loua, or'Loa -	Loua -	Loua -	Eooa -		Rooa -	E Rooa -	A Ooa -	Bo Hooa -	Rooa -	Rooa -
Three, Ka Tarroa -	Toroo -	Tolou -	Tolou -	Toloo -	Tooroo -		Torhoa -	Toroo -	A Toroo -	Bo Dooa -	Toroo -	Toroo -
Four, Ka Wha -	T'Fa -	Fa, and D'Fa -	Fa -	T'Fa -	A Faa -		Ha -	A Haa -	A Faa -	Bo Ha -	Haa, and Faa -	Haa -
Five, Ka Reema -	Reema -	Lima -	Lima -	Neema -	Neema -		Il Lemi -	E Reema -	A Acema -	Bo Heema -	Reema -	Reema -
Six, Ka Onoo -	Hoonoo -	Houw -	Houno -	Vano -	Vano -		Whaine -	A Ono -	A Ono -	Bo Na -	Hono -	Hono -
Seven, Ka Wheetoo -	Widdoo -		Fitou -	Fidda -			Hitoo -	A Heitoo -	A Wheetoo -	Bo Hiddoo -	Heedoo -	Hiddoo -
Eight, Ka Warroo -	Warroo -		Walou -	Varoo -			Wallhoa -	A Warioo -	A Warioo -	Bo Wahoo -	Varoo -	Varoo -
Nine, Ka Eeva -	Heeta -		Ywou -	Heeva -			Iva -	A Ecva -	A Ecva -	Bo Heeva -	Heeva -	Heeva -
Ten, Kaca Haowoo -	Anga Horro -	Onge Foula -	Onge Foula -	Ongofooroo -			Hoolhoa -	A Hooroo -	{ Whannahoo, and Whannahooc. }	Bo Nahoo -	{ Atta Hooroo Anna Hooroo }	Ana Hooroo -
Parkinson, p. 128.			Forster, p. 284.		Herrera, from Le Maire, p. 81.		Forster's Observat. p. 284.		Cook, Vol. ii. p. 346.		Anderson's Vocabulary, in this Appendix.	

APPENDIX, No. III.

VOCABULARY of the LANGUAGE of the FRIENDLY ISLANDS, May, &c. 1777.

<i>Friendly Isles.</i>	<i>English.</i>
Ve faine,	<i>A woman.</i>
Maiee,	<i>Bread-fruit.</i>
Fukkatou,	<i>Barter.</i>
Woa,	<i>Admiration.</i>
My, fogge,	<i>Good.</i>
Attahoa,	<i>A bead; a necklace.</i>
Koehaa, or Kohaeaa?	<i>What is that? or what is the name of it?</i>
Magoo,	<i>Give me.</i>
Le laiee,	<i>Good.</i>
Hou,	<i>Come here.</i>
Moree,	<i>A shaddock.</i>
Omee,	<i>Give me.</i>
Hobba,	<i>A sort of plantain.</i>
Koajee, or Kaoojee,	<i>Done; finished.</i>
Koea,	<i>Yes; it is so.</i>
Amou,	<i>Got; to hold fast.</i>
Horo, horo,	<i>A handkerchief, or wiper.</i>
Ongofooroo,	<i>Ten.</i>
Gehai, or geefai,	<i>There; and that.</i>
Kato,	<i>A basket.</i>
Egeei,	<i>A mat they wear round them.</i>

<i>Friendly Isles.</i>	<i>English.</i>
Fooroo, or fooloo,	<i>Hair.</i>
Foocce vy,	<i>The leg.</i>
Tooa vy,	<i>Upper part of the foot.</i>
Fooloo, fooloo, matta,	<i>The eye-brow.</i>
Emamae,	<i>Pointed plantains.</i>
Evatta vatta,	<i>The breast.</i>
Eboore,	<i>Ditto.</i>
Etooa,	<i>The back.</i>
Erongootoo,	<i>The lips.</i>
Elelo,	<i>The tongue.</i>
Edainga,	<i>The thigh.</i>
Eraimoo,	<i>The hips.</i>
Evae, veene,	<i>The arm-pit.</i>
Too,	<i>The finger.</i>
Vakka, vakka,	<i>The side.</i>
Hekaite,	<i>The belly.</i>
Tareenga,	<i>The ear.</i>
Horo,	<i>To wipe.</i>
Kouta,	<i>Beating with two sticks.</i>
Fangoo, fangoo,	<i>A flute.</i>
Motoo,	<i>To break.</i>
Kooma,	<i>Burnt circular marks.</i>
Taffa,	<i>Raised marks burnt.</i>

<i>Friendly Isles.</i>	<i>English.</i>
Kowy,	<i>The cheeks.</i>
Koomoo, koomoo,	<i>The beard.</i>
Pecto,	<i>The navel.</i>
Eoo,	<i>The nipple.</i>
Etarre,	<i>To cough.</i>
Hengatoo,	<i>Cloth.</i>
Efangoo,	<i>To sneeze.</i>
Eanoo,	<i>To spit.</i>
Etoogee,	<i>To beat, or strike.</i>
Etooe,	<i>The elbow.</i>
Efeelo,	<i>A small rope, or thread.</i>
Haro, or halo,	<i>Go; begone.</i>
Egeea,	<i>The throat.</i>
Eky,	<i>To eat, or chew.</i>
Evagoo,	<i>To scratch.</i>
Ma matta,	<i>Let me look, or see.</i>
Egeea,	<i>The neck.</i>
Enofoa, haioo,	<i>A seat.</i>
Etoo,	<i>To rise up.</i>
Mamao,	<i>To yawn.</i>
Ehapee,	<i>A box, or chest.</i>
Moe, or mohe,	<i>Sleep.</i>
Tangooroo,	<i>To snore.</i>
Ekatta,	<i>To laugh.</i>
Akka,	<i>To kick, or stamp.</i>
Feedjee,	<i>A fillup.</i>
Ekakava,	<i>Sweat.</i>
Eecho,	<i>To hollow, or cry.</i>
Epooo,	<i>A post, or stanchion.</i>
Etolle,	<i>A batcket.</i>
Maalava,	<i>To breathe.</i>
Haila,	<i>To pant.</i>
Oooo,	<i>To bite.</i>
Taffa,	<i>To cut.</i>
Moevae,	<i>The keel.</i>
Eegoo,	<i>The tail of a dog.</i>

<i>Friendly Isles.</i>	<i>English.</i>
Mapoo,	<i>To whistle.</i>
Aipa,	<i>A fishing-hook.</i>
Ainga,	<i>A sort of paint.</i>
Evaika,	<i>A rail.</i>
Kooroo kooroo,	<i>A green dove.</i>
Ekoopamea, cheelee,	<i>A net.</i>
Efooo,	<i>A gimlet, or shark's tooth, used for that purpose.</i>
Aice,	<i>A fan.</i>
Emaimaea, or mee- mee,	<i>A reed, or small organ.</i>
Enecoo,	<i>A cocoa-nut.</i>
Eoono,	<i>Tortoise-shell.</i>
Enoo,	<i>A belt.</i>
Afooneema,	<i>The palm of the hand.</i>
Moemoeea,	<i>A ceremony of putting the foot of one on the head, and turning the hand several times, &c.</i>
Pooa, tareenga,	<i>A sort of plantains.</i>
Kahoo hoonga,	<i>An arrow, or reed.</i>
Atoe farre,	<i>The roof of a house.</i>
Etovee,	<i>A club.</i>
Emamma,	<i>A ring.</i>
Eao,	<i>A bat.</i>
Tehou,	<i>A hundred.</i>
Keeroo,	<i>A thousand.</i>
Laoo varee,	<i>Ten thousand.</i>
Laoo noa,	<i>A hundred thousand, or the greatest number they can reckon.</i>
Poooree,	<i>Night; darkness.</i>
Maheena,	<i>A month.</i>
Fukkatanne,	<i>To sit cross-legged.</i>

Raffa,

<i>Friendly Isles.</i>	<i>English.</i>	<i>Frindly Isles.</i>	<i>English.</i>
Kaffa,	<i>A rope, or cord of cocoa-nut core.</i>	Feenakka,	<i>A bird-cage.</i>
Heegeee,	<i>To lift up.</i>	Eallo,	<i>The rolling of a ship.</i>
Togoo,	<i>To set down.</i>	Etooee,	<i>A needle.</i>
Fetooa, tagee,	<i>To tie.</i>	Epeepeege,	<i>A girl that is a maid.</i>
Vevaite,	<i>To untie.</i>	Efonno,	<i>A turtle.</i>
Tollo tolla,	<i>Cocoa-nut skin.</i>	Maia,	<i>A thing.</i>
Eooma,	<i>The shoulder.</i>	Mahee maia,	<i>Give me something.</i>
Fooo,	<i>A nail (of iron).</i>	Koeea,	<i>Yes, it is.</i>
Atoo,	<i>To give.</i>	Geelee,	<i>A file.</i>
Epallo,	<i>A rat.</i>	Owo,	<i>Wait a little.</i>
Elafo,	<i>To throw away.</i>	Temadoo,	<i>Shall I come?</i>
Haaile,	<i>To go.</i>	Kaee, or Eekace,	<i>No.</i>
Haaile atoo,	<i>To go away.</i>	Kalae,	<i>A blue coat.</i>
Haaile my,	<i>To come.</i>	Oloonga,	<i>A stool.</i>
Elooa,	<i>To puke.</i>	Takkabou,	<i>A course mat to sleep upon.</i>
Matangee,	<i>Wind.</i>	Kakulla,	<i>A sweet smell, sweet smelled.</i>
Mamma, or mamma,		Namooa,	<i>To smell; smell it.</i>
reeva,	<i>Light.</i>	Koe,	<i>It is; as, Koe maa, it is food; Koe maice, it is fruitful.</i>
Tahee,	<i>The sea.</i>	Koatoooo,	<i>A king fisher.</i>
Paho paho,	<i>To paddle.</i>	Mogo,	<i>A lizard.</i>
Hakao, or toree,	<i>Wood; a tree.</i>	Toutou,	<i>A cord.</i>
Ehoreeoo,	<i>To scoop water out of a boat.</i>	Matte laiva,	<i>Dead.</i>
Booloo booloo,	<i>A sail.</i>	Moeha,	<i>More.</i>
Fanna, or fanna too-		Veenaga,	<i>Fine, charming, wonderful.</i>
eeoroongo,	<i>A mast.</i>	Tougge my,	<i>Bring it here.</i>
Toula,	<i>A book.</i>	Ai, (long) angrily,	<i>No.</i>
Tamadje,	<i>A child.</i>	Tamma,	<i>Boy, man, friend, calling to one.</i>
Tangee,	<i>To weep.</i>		
Elango,	<i>A fly.</i>		
Haingoo, toolaice,	<i>A tropic bird.</i>		
Epalla,	<i>A bird's tail.</i>		
Kapukou,	<i>A wing.</i>		
Hepoona,	<i>To fly.</i>		
Togotto,	<i>To lie down.</i>		

<i>Friendly Isles.</i>	<i>English.</i>	<i>Friendly Isles.</i>	<i>English.</i>
Eekkoou,	<i>Here am I; answering one who calls.</i>	Ao,	<i>Clouds.</i>
Haloo,	<i>Go; to go.</i>	Jeela,	<i>A canoe's yard.</i>
Hengalo,	<i>At a distance, a great way off.</i>	Laa,	<i>A sail.</i>
Eafee, or Eafoi,	<i>Hire.</i>	Falle wakaeaa,	<i>The but in a large canoe.</i>
Yehaeaa (<i>inquisitively</i>),	<i>What is that?</i>	Face,	<i>To play.</i>
Kohae koa, or Kowykoa,	<i>What is your name?</i>	Tallafoo,	<i>The fire-place in a large boat.</i>
Kovee, or Kovee-eaa,	<i>Bad.</i>	Goolee,	<i>A sort of windlass, or belaying place for the rope of their sail.</i>
Bongee, bongee,	<i>To-morrow.</i>	Tataa,	<i>A scoop for bailing out a boat.</i>
Peepee,	<i>A pair of scissors.</i>	Taia,	<i>White.</i>
Chenna,	<i>Friend, I say; bark ye.</i>	Oolee,	<i>Black.</i>
Geelee, or geeree,	<i>The skin.</i>	Goola,	<i>Red.</i>
Etchee,	<i>To peel a cocoa nut.</i>	Ohooafee,	<i>Smoke.</i>
Taha pai,	<i>One thing, as a day, &c.</i>	Geeai,	<i>A close kind of mat.</i>
Totto,	<i>Blood.</i>	Fofooa,	<i>Pimples.</i>
Roatoo,	<i>Shall I go.</i>	Maaloonga,	<i>High, mountainous.</i>
Whakae,	<i>Look, see.</i>	Mai,	<i>Motions with the hands in dancing.</i>
Whakae my,	<i>Let me see it.</i>	Touvaa,	<i>A cap or bonnet they wear to shade them from the sun.</i>
Arooweevo,	<i>Below; to let down a rope, or to go down over the ship's side to trade.</i>	Majeela,	<i>A large bamboo fishing-rod.</i>
Aingy,	<i>Large clams or cockles.</i>	Pai,	<i>A thing.</i>
Eegee,	<i>A chief.</i>	Mamahee,	<i>Pain.</i>
Eatooa,	<i>God.</i>	Echee, or Eeke,	<i>Small, little.</i>
A bo,	<i>To-night, at night.</i>	Cheeatta,	<i>A looking-glass.</i>
Any,	<i>Presently, by and bye.</i>	Tangameeme,	<i>A bladder.</i>
Elangee,	<i>The sky.</i>	Goobainga,	<i>A fishing net.</i>
Elaa,	<i>The sun.</i>	Elillo,	<i>Below, underneath.</i>

Face,

<i>Friendly Isles.</i>	English.	<i>Friendly Isles.</i>	English.
Faee,	<i>To shave.</i>	Fageeta,	<i>A ceremony of kissing, &c. on a new ac- quaintance.</i>
Motooa,	<i>A parent.</i>	Goomaa,	<i>A rat.</i>
Moumy,	<i>To paddle, or row.</i>	Agoota, oomoo,	<i>To put a thing in an oven.</i>
Avy, ava, or govy,	<i>A harbour or anchoring- place.</i>	Oomoo,	<i>An oven.</i>
Po, taha, pai,	<i>In one day.</i>	Eadda,	<i>A path.</i>
Ebaika,	<i>A large bat.</i>	Mattabaa,	<i>A door.</i>
Kakaa,	<i>A parrot.</i>	Togga,	<i>A large stick used as a bar behind the door.</i>
Tooge,	<i>Marks on the cheek, made by beating.</i>	Koheeabo,	<i>The paper mulberry plant.</i>
Nono,	<i>To hide a thing.</i>	Faa,	<i>Palm, called Pandanus.</i>
Fonooa, or Kaeenga, Land.		Tangata, ortangatta,	<i>A man.</i>
Beeoo,	<i>A palm which bears clusters of very small nuts.</i>	Taheina,	<i>A child.</i>
Haoomoo,	<i>A large blunt sort of plantains.</i>	Onne, onne,	<i>White sand.</i>
Goolo,	<i>A globular earthen pot, or vessel.</i>	Pai,	<i>Ripe, old.</i>
Manga, mangatei,	<i>A large blue star-fish.</i>	Ea,	<i>A fence made of bam- boo, &c.</i>
Hainga,	<i>A parroquet.</i>	Toee,	<i>The wood which they make their canoes of.</i>
Maagonna,	<i>Full, satisfied with eat- ing.</i>	Mafae,	<i>Wasps nests built in the pod of a plant.</i>
Maheena,	<i>The moon.</i>	Kappe,	<i>A large cylindrical edible root.</i>
Teeleamoo,	<i>A secret.</i>	Ungo, ongo,	<i>A small palm growing to the height of eight feet.</i>
Fonooa bou,	<i>A land of plenty.</i>	Gooholla,	<i>It is gone, or flown:</i>
Oobai,	<i>A song.</i>	Mai, kawaia,	<i>To take away a thing.</i>
Foolehaioo,	<i>The green wattle bird.</i>	Mai, Evaheeo,	<i>To let a thing remain.</i>
Pailoo,	<i>A spoon.</i>		<i>Raeenga,</i>
Kulle, velaive,	<i>A large white spider, with brown and white legs.</i>		

<i>Friendly Isles.</i>	<i>English.</i>	<i>Friendly Isles.</i>	<i>English.</i>
Kacenga,	<i>Land, or properly the shore.</i>	Meedje, meedje,	<i>To drink out of a co- coa-nut.</i>
Fyatooka,	<i>A burying-place.</i>	Matta,	<i>The face.</i>
Woece,	<i>Admiration.</i>	Ty, or Etae,	<i>Excrement.</i>
Kocece,	<i>A fan.</i>	Faitanoo,	<i>A sort of pepper-tree, the juice of which is very acrid.</i>
Waggee hou,	<i>Let it alone.</i>	Nafee, nafee,	<i>A fine white sort of mat.</i>
Bai,	<i>Great.</i>	Abee,	<i>A house to sleep in.</i>
Laika, laika,	<i>Good.</i>	Touaa,	<i>A square bonnet.</i>
Ooo,	<i>A cray fish.</i>	Fukke, fety,	<i>To give a thing gratis, or for friendship's sake.</i>
Feengafee,	<i>A black and white mat.</i>	Tooa, or Tooacee,	<i>A servant, or person of inferior rank.</i>
Aingatooece,	<i>Stained red rushes, which they wear round the waist.</i>	Fukkatooa,	<i>A challenging motion, made by striking the band on the bend of the opposite arm.</i>
An, any,	<i>A little while ago.</i>	Kaeehya, or kaechaa,	<i>A thief.</i>
Hengatoo,	<i>Glazed cloth which they wear.</i>	Fooloo,	<i>A quill.</i>
Falla,	<i>A thick strong mat.</i>	Moojeekakka,	<i>A basket made of cocoa- nut core, and white beads.</i>
Mahagee,	<i>A sort of ulcer, that leaves large laced scars.</i>	Mahanga,	<i>A brother.</i>
Akkaree,	<i>A stool to lay the head on when asleep.</i>	Maele,	<i>An odoriferous shrub, planted near the Eya- tooka.</i>
Naffa,	<i>A large cylindrical piece of wood, hollowed with a slit, which serves as a drum.</i>	Fofolla,	<i>To unfold a piece of cloth.</i>
Toa,	<i>A spear.</i>	Kotjee,	<i>None.</i>
Etanno,	<i>To bury under ground.</i>	Taboone,	<i>To close, or shut; a partition or screen.</i>
Afai,	<i>When.</i>	Too,	<i>To draw back a cur- tain, or screen.</i>
Otoogoo,	<i>Finished.</i>	Ava,	<i>A window; bole.</i>
Maree, or mareeai,	<i>Well done; an acclama- tion.</i>		
Fafa,	<i>To carry one on the back.</i>		
Mamao,	<i>A great way; distant.</i>		

<i>Friendly Isles.</i>	<i>English.</i>	<i>Friendly Isles.</i>	<i>English.</i>
Fonooa, foohoo,	<i>A land of warriors.</i>	Owo, owo, owo.	<i>No, no, no.</i>
Taboo,	<i>Not to touch a thing.</i>	Fohee,	<i>To peel a plantain.</i>
Goomoo, goomoo,	<i>A species of lichen, that grows plentifully on some trees.</i>	Ajeeneu,	<i>A vessel to put drink in.</i>
Laiva,	<i>For good and all; certainly.</i>	Tangee, fe toogee,	<i>Striking the cheeks on the death of their relations.</i>
Bagooee,	<i>A prickly star fish.</i>	Mamaha,	<i>Coral rock under water.</i>
Bedjeeloa,	<i>A crab, with black claws.</i>	Oohee,	<i>A species of diosma.</i>
Fae,	<i>A sister.</i>	Mawhaha,	<i>An excellent root like a potatoe.</i>
Makka fatoo,	<i>Coral rock.</i>	Baa,	<i>A crackling noise; to crack, or snap.</i>
Gailee, gailee,	<i>Dirt.</i>	Boogo,	<i>The largest sort of tree in the islands.</i>
Maa,	<i>Clean.</i>	Taifo,	<i>A mullet.</i>
Ma, tagge tagge,	<i>Let me look at it.</i>	Amou,	<i>Whole; sound; true; valid.</i>
Konna,	<i>Poison.</i>	Faigeeaika,	<i>Iambos.</i>
Fekae, or smatte, fekaee	<i>Hunger.</i>	Kakou,	<i>A shoal, or reef, on which the sea breaks.</i>
Matte, fee aeenoo,	<i>Thirst.</i>	Shainga (in the language of Feejee),	<i>No; there is none.</i>
Aieenoo,	<i>To drink.</i>	Fangoo,	<i>A small calibash shell.</i>
Awhainne,	<i>Near at hand.</i>	Oore, oore,	<i>Black.</i>
Monoo,	<i>An expression of thanks.</i>	Looloo,	<i>An owl.</i>
Mattahoa,	<i>Very good.</i>	Murroo,	<i>Soft.</i>
Toooa,	<i>Both; we; both of us.</i>	Faifaika,	<i>Hard.</i>
Fooa, repeated,	<i>A great number.</i>	Feengotta,	<i>A sort of shell.</i>
Boola,	<i>Small white shells.</i>	Wouaince,	<i>I am here; i. e. when called upon.</i>
Anoo, anoo,	<i>To swim.</i>	Mahagge, fatoo,	<i>A dropsy.</i>
Anga,	<i>A man.</i>	Goe enee,	<i>Near at hand.</i>
Haile,	<i>A knife.</i>	Fukka, ma fooa,	<i>An harbour in which they catch pigeons, &c.</i>
Haile, fofoo,	<i>A knife that shuts.</i>	Fatooree,	<i>Thunder.</i>
Adoo,	<i>Give it; to give.</i>	A faa,	<i>A storm; lightning.</i>
Geehea,	<i>Which, or what.</i>		
Tohagge,	<i>Let me look at, or see it.</i>		
Namoogoo,	<i>A stink, or bad smell.</i>		
Namoo, kakulla,	<i>A sweet smell.</i>		
Boobooa, tahee,	<i>Salt.</i>		
Meeme,	<i>Urine.</i>		

<i>Friendly Isles.</i>	<i>English.</i>	<i>Friendly Isles.</i>	<i>English.</i>
Toufarre,	<i>A besom.</i>	Kaee ongonna,	<i>I do not understand you.</i>
Tongo,	<i>A wood, of which bows are made.</i>	Mafanna,	<i>Warm.</i>
Ooha,	<i>Rain.</i>	Anapo,	<i>Last night.</i>
Tooboo,	<i>To grow.</i>	Fakkahooa,	<i>The Southerly wind; or a foul wind.</i>
Tawagge, totto,	<i>The red-tailed tropic bird.</i>	Looloo,	<i>To roll, as a ship.</i>
Kadjee,	<i>There is no more; or none.</i>	Matangee,	<i>The wind.</i>
Fanna, fanna,	<i>To wash the hands before meals.</i>	Matangee anga, or matangee lecoo,	<i>The East and North wind, or a fair wind.</i>
Mooonga,	<i>Mountains; a mountain.</i>	Amooee, or tamoo-ree,	<i>From behind.</i>
Keeneeo,	<i>Low land.</i>	Amooa, or tamooa,	<i>From before.</i>
Laoo allee,	<i>A great many; an endless number.</i>	Ahaa, or koehaa,	<i>For what reason?</i>
Ogookaee,	<i>No; there is none.</i>	Mohe fai,	<i>Where shall I sleep?</i>
Laia, or koelaia,	<i>Speech; words.</i>	Koo mafoore,	<i>To lie along, or yield, as a ship close hauled.</i>
Kaho,	<i>An arrow.</i>	Palla,	<i>Rotten.</i>
Aiceboo,	<i>A vessel, or dish.</i>	Elooa,	<i>A hole.</i>
Tooeo,	<i>A club.</i>	Molle, or molle mole,	<i>Smooth.</i>
Feila,	<i>To pull a rope.</i>	Keeai,	<i>A plant they make mats of; the cultivated Pandanus.</i>
Eevee, aai,	<i>Acheer, in pulling a rope.</i>	Tongo laice,	<i>Mangrove.</i>
Feilaa too,	<i>A word given by one, on pulling a rope, and the rest repeat Woa, as a response.</i>	Reemoo,	<i>Seaweed.</i>
Engago,	<i>Fat, or lard of a hog.</i>	Fety,	<i>A term of friendship.</i>
Kanno, matte,	<i>The lean part of meat.</i>	Jeejee,	<i>Esculent dracena.</i>
Kofooa,	<i>A kidney.</i>	Taboo laia,	<i>Don't speak; hold your tongue.</i>
Kollofeea,	<i>The name of the volcano on Tofooa.</i>	Toonooa,	<i>Dressed, cooked.</i>
Moggocheea,	<i>Cold.</i>	Tohke,	<i>A measure.</i>
Hooa,	<i>The going about, or tacking of a ship.</i>	Toohagge,	<i>Let me see it.</i>
Ongonna,	<i>To understand.</i>	Taheine,	<i>A young girl; a daughter.</i>

Haine,

<i>Friendly Isles.</i>	English.
Haine,	<i>Here.</i>
Baiahou,	<i>Swell of the sea.</i>
Maea,	<i>A rope.</i>
Otta,	<i>Raw; as raw meat.</i>
Moho,	<i>Meat well dressed.</i>
Maoo lillo,	<i>Low land.</i>
Moanna,	<i>Deep water; sea.</i>
Kae haia,	<i>Which is it you want?</i>
Vava tahee,	<i>Red coral.</i>
Feefy,	<i>A species of mimosa.</i>
Fatoo,	<i>The belly.</i>
Mee mee,	<i>To suck bones.</i>
Meedje meedje,	<i>To suck as a child.</i>
Ooree,	<i>A rudder.</i>
Tainga,	<i>A seed of a plant.</i>
Oolel tesse,	<i>Incisions in the fore-skin, which contracting prevent its covering the glans.</i>
Vefoo,	<i>To hide a thing.</i>
Laifa,	<i>A silver fish.</i>
Heenaheena	<i>White; yellow.</i>
Feeoo,	<i>Acrid; bitter.</i>
Goomo,	<i>To look for a thing that is lost.</i>
Eeta,	<i>Angry.</i>
Aneafee,	<i>Yesterday.</i>
Gefai,	<i>Unknown; strange; as a strange man.</i>
Fono,	<i>To eat.</i>
Kailee tokee,	<i>A Panama shell.</i>
Toffe,	<i>A sort of hammer oyster.</i>
Toogoo,	<i>Let it lie, or remain.</i>
Koehaa, hono, hen-	
goa,	<i>What is the name of it?</i>
Loce,	<i>To understand.</i>
Booga,	<i>To hold fast.</i>
Loloa,	<i>Long.</i>
Kotjee,	<i>To cut.</i>

<i>Friendly Isles.</i>	English.
Fatjee,	<i>To break.</i>
Fohenna,	<i>A son; a brother.</i>
Matee,	<i>A fig-tree.</i>
Lohee,	<i>A lie.</i>
Mato,	<i>Steep; high.</i>
Patoo,	<i>A stroke; to strike.</i>
Hooho,	<i>The breasts.</i>
Momoggo,	<i>Cold.</i>
Saiouhai,	<i>Admiration.</i>
Noo,	<i>Mine; of me.</i>
Valla,	<i>A piece of cloth worn round the waist.</i>
Dooyoo, a ma- too, eeoe,	<i>A song in favour of a victor.</i>
Mullo,	<i>Serene; settled; smooth.</i>
Vaitte,	<i>To untie a thing.</i>
Mccheefo,	<i>Come down below.</i>
Fetagee; malowhee,	<i>To fight.</i>
Tao,	<i>A spear.</i>
Eenee,	<i>Now; immediately.</i>
Mamanna; au man- na manna,	<i>Engaged; contracted to.</i>
Fukka, booakka,	<i>An epithet of abuse; contempt.</i>
Aloalo,	<i>To fan, or cool.</i>
Tammaha,	<i>Certain great chiefs.</i>
Tamolao,	<i>Chief.</i>
Mahae,	<i>A torn hole.</i>
Goefai,	<i>What is.</i>
Iaoo,	<i>To count, or reckon.</i>
Manakko,	<i>To give.</i>
Fooo,	<i>New; lately made.</i>
Modooa,	<i>Old; worn.</i>
Maa,	<i>A sour plantain, by being put under ground.</i>
Kaifoo,	<i>A brownish yellow.</i>
Eafee,	<i>To play on the fute.</i>

<i>Friendly Isles.</i>	<i>English.</i>	<i>Friendly Isles.</i>	<i>English.</i>
Mou afai,	<i>When do you go ?</i>	Moooe,	<i>Alive ; life ; soul ;</i>
Afaia,	<i>How many ?</i>		<i>God ; or divine</i>
Cheefa,	<i>A pearl oyster.</i>		<i>spirit</i>
Gooc, goec,	<i>A saw shell.</i>	Tooo,	<i>A tree, with the berries</i>
Fotoohoa,	<i>A rock oyster.</i>		<i>of which they stain</i>
Ogoo,	<i>Of me ; belonging to me.</i>		<i>their cloth.</i>
Lelange,	<i>To make.</i>	Ogoohaika,	<i>Who shall I give this</i>
Behange.	<i>Let me see it.</i>		<i>to ? Who shall I</i>
Foo,	<i>To box.</i>		<i>help ?</i>
Heeva,	<i>A song, with many wo-</i>	Maha,	<i>Finished ; empty.</i>
	<i>men singing different</i>	Page,	<i>A little paddle they ex-</i>
	<i>keys.</i>		<i>ercise with.</i>
Ooloo pokko,	<i>The head.</i>	Faio,	<i>Small branched coral.</i>
Koukou,	<i>To bathe.</i>	Cheeagge,	<i>To throw a thing away.</i>
Mabba,	<i>A three kernelled nut.</i>	Faice tamma,	<i>Pregnancy.</i>
Eclo,	<i>To know.</i>	Lalanga,	<i>To make.</i>
Fotte, fotta,	<i>To squeeze gently with</i>	Vao,	<i>A wild uncultivated</i>
	<i>the hands.</i>		<i>country.</i>
Fangootooa,	<i>Wrestling.</i>	Necoo goola,	<i>Cabbage tree.</i>
Momoho,	<i>Ripe.</i>	Route,	<i>Hibiscus ; rosa sinensis.</i>
Koffe,	<i>Bamboo which they</i>	Foa,	<i>A custom of beating the</i>
	<i>beat with on the</i>		<i>head with a tooth</i>
	<i>ground.</i>		<i>till it bleeds.</i>
Alla,	<i>I say.</i>	Cheelee neefo,	<i>A custom of beating the</i>
Waila,	<i>Hot.</i>		<i>teeth on the same</i>
Pango,	<i>Bad.</i>		<i>occasion.</i>
Orlongaa,	<i>Tbread of which they</i>	Hogga tainga,	<i>A custom of thrusting</i>
	<i>make their nets, or</i>		<i>a spear into their</i>
	<i>the plant.</i>		<i>thighs ; also a mourn-</i>
Monec,	<i>Truth.</i>		<i>ing ceremony.</i>
Anga,	<i>A shark.</i>	Toofatao,	<i>Thrusting a spear into</i>
Laffa,	<i>Ringworm.</i>		<i>the sides under the</i>
Fooa,	<i>Fruit ; flower.</i>		<i>arm-pits on these oc-</i>
Kokka,	<i>A tree they stain their</i>		<i>casions.</i>
	<i>cloth brown with,</i>	Tooengootoo,	<i>Doing the same through</i>
	<i>i. e. the bark.</i>		<i>the cheeks into the</i>
			<i>mouib.</i>
		Kafoo,	<i>The garment they com-</i>
			<i>monly wear.</i>

<i>Friendly Isles.</i>	<i>English.</i>	<i>Friendly Isles.</i>	<i>English.</i>
Offa,	<i>A term of friendship; as,</i>	Gooaa,	<i>Who is it?</i>
Taio offa,	<i>My friend, I am glad to</i> <i>see you.</i>	Avo,	<i>To go, or take away.</i>
Toofa,	<i>To divide, or share out</i> <i>food.</i>	Valle,	<i>Mad.</i>
Maeneene,	<i>To tickle.</i>	Lelaice a bee kovee,	<i>Is it good, or bad?</i>
Hailulla,	<i>Sarcosma.</i>	Taboonee,	<i>To shut, or close.</i>
Hooo,	<i>A wooden instrument</i> <i>with which they clear</i> <i>away grass from</i> <i>their fences.</i>	Taac,	<i>To beat, or strike.</i>
Aho,	<i>The dawn, or day-break.</i>	Ahae,	<i>Who, or where.</i>
		Mamaa,	<i>Light.</i>
		Mamaffa,	<i>Heavy.</i>
		Faike,	<i>A cuttle fish.</i>
		Vai veegoo,	<i>Wet; moist.</i>

APPENDIX, No. IV.

VOCABULARY of the LANGUAGE of NOOTKA, or KING GEORGE'S SOUND, April, 1778.

<i>Nootka.</i>	<i>English.</i>	<i>Nootka.</i>	<i>English.</i>
Opulſzthl,	<i>The ſun.</i>	Kootche, or kotche,	<i>To paddle.</i>
Onulſzthl,	<i>The moon.</i>	Aook, or chian is,	<i>To eat, to chew.</i>
Nas, or eenacehl nas,	<i>The ſky.</i>	Topalſzthl, or too-	
Noohchai,	<i>A mountain, or hill.</i>	pilſzthl,	<i>The ſea.</i>
Mookſee,	<i>Rocks, or the ſhore.</i>	Oowhabbe,	<i>A paddle.</i>
Tanaſs, or tanas,	<i>A man.</i>	Shapats, or ſhapitz,	
Oonook,	<i>A ſong.</i>	or chapas,	<i>A canoe.</i>
Eeneek, or eleek,	<i>Fire.</i>	Tawailuck,	<i>White bugle beads.</i>
Nuhchee, or nook-		Seekemaile,	<i>Iron, or metal of any</i>
chee,	<i>The land; a country.</i>	ſort.	
Koaſſama,	<i>The ground.</i>	Ahkoo, or ahko,	<i>This.</i>
Mahtai,	<i>A houſe.</i>	Kaa, or kaa chelle,	<i>Give it me, let me look</i>
Neit, or neet,	<i>A candle, or lamp-</i>	at it, or examine it.	
	<i>light.</i>	Wook hak,	<i>Will he not do it?</i>
Neetopok,	<i>The ſmoke of a lamp.</i>	Ma, or maa,	<i>Take it.</i>
Taſſyai,	<i>A doer.</i>	Chakeuk,	<i>A hatchet, or backing</i>
Ai, and aio,	<i>Yes.</i>	tool.	
Wook, or Wik,	<i>No.</i>	Eetche, or abeeſh,	<i>Diſpleaſure.</i>
Wik ait,	<i>None, not any.</i>	Haoome, or haooma,	<i>Food,</i>
Macook,	<i>To barter.</i>	Takho,	<i>Bad. This iron is bad,</i>
Kaacemai, or kyomai,	<i>Give me ſome more for</i>	takho ſeekemaile.	
it.		Chelle,	<i>I, me.</i>
			Kaceo,

<i>Nootka.</i>	<i>English.</i>	<i>Nootka.</i>	<i>English.</i>
Kaceo,	<i>Ercken.</i>	Tohumbeet,	<i>Virgated pine ; silver pine.</i>
Alle, or alla,	<i>(Speaking to one) Friend ; bark ye.</i>	Atlieu,	<i>The depending pine, or cypress.</i>
Klao appe, or klao,	<i>Keep it ; I'll not have it.</i>	Koeeklipt,	<i>The Canadian pine.</i>
Asko,	<i>Long, or large.</i>	Cho,	<i>Go.</i>
Iakooeshumaiſh,	<i>Clothing in general.</i>	Sateu,	<i>A pine-top.</i>
Tahquoe, or tooh- quoe,	<i>A metal button, or ear-ring.</i>	Kleeteenek,	<i>The little cloak that they wear.</i>
Wae,	<i>(Calling to one, perhaps) you !</i>	Kleethak,	<i>A bear's skin.</i>
Weekeetateesh,	<i>Sparkling sand, which they sprinkle on their faces.</i>	Klochimme,	<i>Muscles.</i>
Chauk,	<i>Water.</i>	Ohkullik,	<i>A wooden box they hold things in.</i>
Pacheetl, or pachatl,	<i>To give ; give me.</i>	H'ſaiakaſh, or ſai- kaſzth,	<i>Coarse mats of bark.</i>
Haweelſh, or ha- walth,	<i>Friendſhip, friend.</i>	Eeſee,	<i>An instrument of bone to beat bark.</i>
Kleeſetl,	<i>To paint, or mark with a pencil.</i>	Chapitz koole,	<i>The model of a canoe.</i>
Abeetſze,	<i>To go away, or depart.</i>	Klapatuketeel,	<i>A bag made of mat.</i>
Sheefookto,	<i>To remain or abide.</i>	Tahmiſ,	<i>To spit ; spittle.</i>
Seeaik,	<i>A ſtone weapon, with a ſquare point.</i>	Wafukſheet,	<i>To cough.</i>
Suhyaik,	<i>A ſpear, poin'ed with bone.</i>	Poop,	<i>Common moſs.</i>
Taak,	<i>The wood of the depending pine.</i>	Okumha,	<i>The wind.</i>
Lukſheet, or luk- ſheetl,	<i>To drink.</i>	Chutzquabeelſ,	<i>A bag made of ſeal ſkin.</i>
Soochiſ,	<i>A tree, a wood.</i>	Konneemis,	<i>A kind of ſea weed.</i>
Haieeaipſ,	<i>A broad leaf, ſhrub, or underwood.</i>	Quaookl, or took- peetl,	<i>To ſit down.</i>
		Klukeefſzthl, or quo- eelſzthl,	<i>To riſe up.</i>
		Tſookeeatſ,	<i>To walk.</i>
		Kummutchchutl,	<i>To run.</i>
		Klutſklaee,	<i>To ſtrike, or beat.</i>
		Teefhcheetl,	<i>To throw a ſtone.</i>
			<i>Teelfzhtſee.</i>

<i>Nootka.</i>	<i>English.</i>	<i>Nootka.</i>	<i>English.</i>
Teelſzttee,	<i>To rub, or sharpen metal.</i>	Wamuhte,	<i>Twisted thongs and sinews, worn about their ankles.</i>
Tfook,	<i>To cleave, or strike hard.</i>	Kutſſeoataia,	<i>Veins under the skin.</i>
Mahkatte,	<i>A small lilaceous root which they eat.</i>	Tookquuk,	<i>The skin.</i>
Eumahtame,	<i>Fur of a sea otter.</i>	Muſzthſe,	<i>Pain.</i>
Cheemaine,	<i>Their largest fiſhing books.</i>	Waeetch,	<i>To sleep.</i>
Moofſtatte,	<i>A bow.</i>	Sikſaimaha,	<i>To breathe, or pant.</i>
Kahſheetl,	<i>Dead.</i>	Tuhſheetl,	<i>To weep.</i>
Kleeſhſheetl,	<i>To shoot with a bow.</i>	Matſkoot,	<i>A fly.</i>
Tſeehatte,	<i>An arrow.</i>	Matook,	<i>To fly.</i>
Katſhak,	<i>A flaxen garment, worn as their common dreſs.</i>	Kooees, or quoees,	<i>Snow, or hail.</i>
Heſhcheene,	<i>A plain Venus ſhell.</i>	Aopk,	<i>To whistle.</i>
Koohminne,	<i>A bag rattle.</i>	Aſheeaiſheetl,	<i>To yawn.</i>
Akeeuk,	<i>A plain bone point for ſtriking ſeals with.</i>	Elſthtleek,	<i>An inſtrument of two ſticks ſtanding from each other, with barbs.</i>
Kaheita,	<i>A barbed bone point for ditto.</i>	Cheeeekis,	<i>A ſcar of a wound.</i>
Cheetakulheiwha,	<i>Bracelets of white bugle beads.</i>	Tchoo,	<i>Throw it down, or to me.</i>
Mittemulſzſth,	<i>Things of ſkin worn about the wiſt and neck.</i>	Cheetkoohekai, or } <i>A wooden inſtrument</i>	} <i>with many bone teeth, to catch ſmall fiſh with.</i>
Iaiopox,	<i>Pieces of copper worn in the ear.</i>	Cheetkoaik,	
Neekſheetl,	<i>To ſneeze.</i>	Kaenne, or Koenai,	<i>A crow, a bird.</i>
Suchkas,	<i>A comb.</i>	Keefapa,	<i>A fiſh; a white bream.</i>
Seehl,	<i>Small feathers which they ſtrew on their beads.</i>	Klaamoo,	<i>A bream ſtriped with blue and gold colours.</i>
		Taaweesh, or Tſuf- } <i>A ſtone weapon, or tomabawk, with a wooden handle.</i>	} <i>Kamaiſthlik,</i>
		keeah,	

<i>Nootka.</i>	<i>English.</i>	<i>Nootka.</i>	<i>English.</i>
Kamaisthlik,	<i>A kind of snare, to catch fish or other animals with.</i>	Acea,	<i>A sardine.</i>
Klahma,	<i>Wing feathers of a red bird.</i>	Koeetsak,	<i>A wolf-skin dress.</i>
Seetsaennuk,	<i>Anger; scolding.</i>	Keepsleetokszl,	<i>A woollen garment.</i>
Heeeai, or Heeeee,	<i>A brown streaked snake.</i>	Issu,	<i>Pine bark.</i>
Klapissime,	<i>A racoon.</i>	Wanshee,	<i>Wild cat skin (lynx brunneus).</i>
Owatinne,	<i>A white-headed eagle.</i>	Chastimmetz,	<i>A common, and also pine martin.</i>
Kluhmifs,	<i>Train oil; a bladder filled with it.</i>	Ookoomillszthl,	<i>A little, round, wooden cup.</i>
Oukkooma,	<i>Large carved wooden faces.</i>	Kooomitz,	<i>A human skull.</i>
Kotyook, or hotyok,	<i>A knife.</i>	Keehlwhamoot,	<i>A skin bladder used in fishing.</i>
See eema,	<i>A fishing net.</i>	Tseeapoox,	<i>A conic cap made of mat, worn on the head.</i>
Weena,	<i>A stranger.</i>	Summeto,	<i>A squirrel; they also called a rat by this name.</i>
Quahmifs,	<i>Fish roe strewed upon pine branches and sea weed.</i>	Maalszthl,	<i>A deer's horn.</i>
Kaatl,	<i>Give me.</i>	Jakops,	<i>A man, or male.</i>
Hooksquaboolsthl,	<i>A whale harpoon and rope.</i>	Kolsheetl, or Kol-	
Komook,	<i>Chimæra monstrosa.</i>	sheat,	<i>To sup with a spoon.</i>
Quotluk, or quot-		Achatla, or Achak-	
lukac,	<i>A sea otter's skin.</i>	lak,	<i>What is your name?</i>
Maafenuilsthl,	<i>An oblong wooden weapon, two feet long.</i>	Achatlaha,	<i>What is his name?</i>
Hokooma,	<i>A wooden mask of the human face.</i>	Akassheha, or } akassche, }	<i>What is the name of that?</i>
Tooquacumilsthl.	<i>A seal skin.</i>	Haismussik,	<i>A wooden sabre.</i>
Cha,	<i>Let me see it.</i>	Maeetsalulsthl,	<i>A bone weapon, like the Patoo.</i>
Sooma,	<i>A kind of baddock, of a reddish brown colour.</i>	Kookelixo,	<i>A fish fin; the hand.</i>
		Natcha,	<i>A fish tail.</i>

<i>Nootka.</i>	<i>English.</i>	<i>Nootka.</i>	<i>English.</i>
Klihkleeck,	<i>The hoof of an animal.</i>	Eineetl,	<i>The name they apply to a goat; probably of a deer.</i>
Klaklafm,	<i>A bracelet.</i>	Seeta,	<i>The tail of an animal.</i>
Ko,	<i>An article, to give strength of expression to another word.</i>	Seehsheetl,	<i>To kill.</i>
Nahei, or naheis,	<i>Friendship.</i>	Ooolfzth,	<i>A sand piper.</i>
Teelsthoop,	<i>A large cuttle fish.</i>	Sacemitz,	<i>Chequered straw baskets.</i>
Pachas,	<i>He gave it me.</i>	Chookwak,	<i>To go up, or away.</i>
Quaeecaitsaak,	<i>A yellow, or red fox.</i>	Kloofasht,	<i>Smoked herrings.</i>
Atchakoe,	<i>A limpet.</i>	Keetsma,	<i>Puncturation.</i>
Aheita,	<i>A sweet fern root they eat.</i>	Mikeellzyth,	<i>To fasten, or tie a thing.</i>
Kishkilltup,	<i>The strawberry plant.</i>	Cheeteekamilzst,	<i>White beads.</i>
Akhmupt,	<i>A narrow grass that grows on the rocks.</i>	Kakkumipt,	<i>A sea weed, or grass, on which they strew fish roe.</i>
Klaiwahmifs,	<i>A cloud.</i>	Eiffuk,	<i>A sort of leek; allium triquetrum.</i>
Mollsthapait,	<i>A feather.</i>	Kutskushilzst,	<i>To tear a thing.</i>
Tacetcha,	<i>Full, satisfied with eating.</i>	Mitzleo,	<i>A knot.</i>
Kaaitz,	<i>A necklace of small volute shells.</i>	Mamakeeo,	<i>To tie a knot.</i>
Tahooquoffim,	<i>A carved human head of wood, decorated with hair.</i>	Klukilzst,	<i>To loosen, or untie.</i>
Moowatche,	<i>A carved wooden vizor, like the head of a Quebrentabueffos.</i>	Klakaikom,	<i>The leaf of a plant.</i>
Mamat,	<i>A black linnet, with a white bill.</i>	Safinne, or safin,	<i>A humming bird.</i>
Klaokotl,	<i>Give me something.</i>	Koohquoppa,	<i>A granulated lily root they eat.</i>
Pallszthpatl,	<i>Glimmer (sheet).</i>	Seeweebt,	<i>Alder tree.</i>
		Kaweebt,	<i>Raspberry bush.</i>
		Kleehseep,	<i>The flower of a plant.</i>
		Klumma,	<i>Large wooden images placed at one end of their houses.</i>
		Aiahtoop, or aiah-toopsh,	<i>A porpoise.</i>
			Toshko,

<i>Nootka.</i>	<i>English.</i>	<i>Nootka,</i>	<i>English.</i>
Toshko,	<i>A small brown spotted cod.</i>	Aminulszth,	<i>A fish.</i>
Afzlimupt, or ulz- thimipt,	<i>Flaxen stuff, of which they make their garments.</i>	Natchkoa and Matsecta,	<i>The particular names of two of the monstrous images called Klumma.</i>
Wakash,	<i>An expression of approbation, or friendship.</i>	Houa,	<i>To go that way.</i>
Kullekeea,	<i>Troughs out of which they eat.</i>	Achichil,	<i>What does he say?</i>
Kaots,	<i>A twig basket.</i>	Aeck,	<i>The oval part of a whale's dart.</i>
Sllook,	<i>The roof of a house; boards.</i>	Aptsheetl,	<i>To steal.</i>
Eilfzthmukt,	<i>Nettles.</i>	Quoeep,	<i>To break.</i>
Koeeklas,	<i>A wooden stage, or frame, on which the fish roe is dried.</i>	Uhshapai,	<i>To pull.</i>
Matlieu,	<i>A withe of bark for fastening planks.</i>	Tfeehka,	<i>A general song.</i>
Nahafs,	<i>A circular hole that serves as a window.</i>	Apte, or appe,	<i>You.</i>
Neetsoanimme,	<i>Large planks, of which their houses are built.</i>	Kai,	<i>Thanks.</i>
Chaipma,	<i>Straw.</i>	Kotl,	<i>Me, I.</i>
Haquanuk,	<i>A chest, or large box.</i>	Punihpunih,	<i>A black beating stone.</i>
Chahkots,	<i>A square wooden bucket, to hold water.</i>	Nootka,	<i>The name of the bay or sound.</i>
Chahquanna,	<i>A square wooden drinking cup.</i>	Yatseenequoppe,	<i>The names of three men.</i>
Klennut,	<i>A wooden wedge.</i>	Kakallakeechee- look,	
Kolkolfainum,	<i>A large chest.</i>	Nololokum,	
Klieutfunnim,	<i>A board to kneel on when they paddle.</i>	Satfuhcheek,	<i>The name of a woman.</i>
Tfeelszthook,	<i>A frame of square poles.</i>	<i>Names of different Parts of the Body.</i>	
		Ooomitz,	<i>The head.</i>
		Apsoop,	<i>The hair of the head.</i>
		Uhpeukel, or up- uppea,	<i>The forehead.</i>
		Cheecheeeth,	<i>The teeth.</i>
		Choop,	<i>The tongue.</i>

<i>Nootka.</i>	<i>English.</i>	<i>Nootka.</i>	<i>English.</i>
Kuffee, or kassée,	<i>The eye.</i>	Aapso,	<i>The arm.</i>
Neets,	<i>The nose.</i>	Aapsoonilk,	<i>The arm-pit.</i>
Papai,	<i>The ear.</i>	Eneema,	<i>The nipple.</i>
Aamifs,	<i>The cheek.</i>	Kooquainux, or	
Eethlux,	<i>The chin.</i>	Kooquainuxoo,	<i>The fingers.</i>
Apuxim,	<i>The beard.</i>	Chushchuh,	<i>Nail of the finger.</i>
Tseekoomitz,	<i>The neck.</i>	Kleashklinne,	<i>The thighs and leg.</i>
Seekutz,	<i>The throat.</i>	Klahtimme,	<i>The foot.</i>
Esulszth,	<i>The face.</i>	Aiahkomeetz,	<i>The thumb.</i>
Eethluxooth,	<i>The lips.</i>	Kopeeak,	<i>The fore finger.</i>
Klooshkooah, klah,		Taceai,	<i>The middle finger.</i>
tamai,	<i>The nostrils.</i>	Oatso, or akhukluc,	<i>The ring finger.</i>
Aeetchse,	<i>The eye-brow.</i>	Kasseka,	<i>The little finger.</i>

APPENDIX, No. V.

VOCABULARY of the LANGUAGE of ATOOI, one of the SANDWICH ISLANDS, January, 1778.

<i>Atooi.</i>	English.	<i>Atooi.</i>	English.
Tehaia,	<i>Where.</i>	Areca,	<i>Wait a little.</i>
Mahaia,	<i>Ditto.</i>	Myao,	<i>Finger and toe nails.</i>
Aorre, or Aoe,	<i>No.</i>	Eeno,	<i>Bad.</i>
He oho,	<i>The hair.</i>	Hootee, hootee,	<i>To pluck up, or out.</i>
E poo,	<i>The head.</i>	Tooanna,	<i>A brother.</i>
Papaiee aoo,	<i>The ear.</i>	Teina,	<i>A younger brother.</i>
Herace,	<i>The forehead.</i>	Otooma heeva,	<i>A man's name.</i>
Matta,	<i>The eye.</i>	Nanna,	<i>Let me see it.</i>
Pappareenga,	<i>The cheek.</i>	Noho	<i>To fit.</i>
Haieea,	<i>Fish.</i>	Hoe,	<i>To go.</i>
Eeeheu,	<i>The nose.</i>	Hooarra,	<i>Sweet potatoes.</i>
Oome oome,	<i>The beard.</i>	E Taceai,	<i>Calling to one.</i>
Haire,	<i>To go.</i>	Waheine,	<i>A woman.</i>
Erawha,	<i>Tears of joy.</i>	Teeorre,	<i>To throw away a thing.</i>
Aee,	<i>The neck.</i>	He, aieeree,	<i>The skin.</i>
Poheeve,	<i>The arm.</i>	Ma, ty ty,	<i>To look at, or survey a thing.</i>
Ooma ooma,	<i>The breast.</i>	Tommomy,	<i>Come here.</i>
Heoo,	<i>The nipple.</i>	Erooi,	<i>To retch, to puke.</i>
Peeto,	<i>The navel.</i>	Too,	<i>Sugar cane.</i>
Hoohaa,	<i>The thigh.</i>	Maa mona,	<i>Sweet or savoury food.</i>
He, wawy,	<i>The leg.</i>		<i>Tooharre,</i>
Eroui,	<i>Wait a little.</i>		

<i>Atooi.</i>	English.	<i>Atooi.</i>	English.
Tooharre,	<i>To spit.</i>	Ai,	<i>Yes.</i>
Matou,	<i>I, first person singular.</i>	Ateera,	<i>Done ; at an end.</i>
My, ty	<i>Good.</i>	Hevaite,	<i>To unfold.</i>
Otaeao, } Terurotoa, }	<i>Names of two chiefs.</i>	Noona,	<i>Above.</i>
Oome,	<i>A great number.</i>	Tapaia,	<i>To abide ; to keep or restrain from going.</i>
Poe,	<i>Taro pudding.</i>	Poore,	<i>A prayer.</i>
Oohe,	<i>Yams.</i>	Tahouna,	<i>A priest.</i>
Booa,	<i>A bog.</i>	Atee,	<i>To fetch, or bring.</i>
Eeneeoo,	<i>Cocoa nuts.</i>	Meeme,	<i>To make water.</i>
Ono,	<i>To understand.</i>	Ehaia,	<i>Where.</i>
Ectee,	<i>To understand, or know.</i>	Poota,	<i>A hole.</i>
Otae,	<i>A man's name.</i>	Mao,	<i>That way.</i>
Maonna,	<i>Full, satisfied with eat- ing.</i>	Mareira,	<i>This place.</i>
Owytoochainoa,	<i>What is your name?</i>	Eco,	<i>There.</i>
Tanata,	<i>A man.</i>	Evaa,	<i>A canoe.</i>
Tangata,	<i>Ditto.</i>	Touroonoa,	<i>A man's name.</i>
Pahoo,	<i>A drum.</i>	My ty,	<i>Let me look.</i>
Ehoora,	<i>A kind of dance.</i>	Aieeboo,	<i>A vessel of gourd shell.</i>
Maro,	<i>A narrow stripe of cloth they wear.</i>	Ahewaite,	<i>Mullus cretaceus.</i>
Hoemy ; harremy,	<i>To come.</i>	Opoore,	<i>Sparus parvus puncta- tus.</i>
Eroemy,	<i>Fetch it here.</i>	Tae,	<i>The sea.</i>
Taooa,	<i>We, first person plural.</i>	Evy,	<i>Fresh water.</i>
Toura,	<i>A rope.</i>	Aiva,	<i>A barbour.</i>
Ooroo,	<i>Bread fruit.</i>	Eerotto,	<i>Within, into.</i>
Etee,	<i>Dracena.</i>	Owyte eree,	<i>What is the chief's name?</i>
Appe,	<i>Virginian Arum.</i>	Toneoneo,	<i>A chief's name.</i>
Matte,	<i>Dead.</i>	Motoo,	<i>To tear, or break.</i>
Aoonai,	<i>In a short time ; pre- sently.</i>	Toe,	<i>A stone adze.</i>
Paha,	<i>Perhaps.</i>	Vaheco,	<i>Let it lie, or remain.</i>
		Haieche,	<i>A barbed dart.</i>
		Hooroo manoo,	<i>Birds feathers.</i>
			Motoo,

<i>Atooi.</i>	English.
Motoo,	<i>An island.</i>
Hamoea,	<i>A ceremony of clapping the hands to the head, and prostrating themselves to the chief.</i>
Worero,	<i>Lost; stole.</i>
Acenoo,	<i>To drink.</i>
Tehaia, orooa,	<i>Where are you?</i>
Ou,	<i>I, first person singular.</i>
Eunai,	<i>Here; at this place.</i>
Pororee,	<i>Hunger; hungry.</i>
Hereema,	<i>A species of Sida.</i>
Meere, meere,	<i>To look at, or behold.</i>
Moa,	<i>A fowl.</i>
Manoo,	<i>A bird.</i>
Dirro,	<i>Below.</i>
Modooa, tanne,	<i>Father.</i>
Modooa, waheine,	<i>Mother.</i>
Naiwe, nawie,	<i>Pleasant; agreeable.</i>
Hai, raa,	<i>The sun.</i>
Hairanee,	<i>The sky.</i>
Abobo,	<i>To-morrow.</i>
Heaho,	<i>A small rope.</i>
Tereira,	<i>There; that way.</i>
Pymy,	<i>Throw it here.</i>
Ewououtte,	<i>Morus Papyrif.</i>
Moe,	<i>To sleep.</i>
Nooe,	<i>Large.</i>
Poowha,	<i>To yawn.</i>
Ahaia,	<i>When; at what time.</i>
Wehai,	<i>To uncover and undo a thing.</i>
Tooto,	<i>A small straw rope.</i>
Eaha, nai,	<i>What is this?</i>
Maceea,	<i>Plantains.</i>

<i>Atooi.</i>	English.
Parra,	<i>Ripe; as, ripe fruit.</i>
Toe, toe,	<i>Cold.</i>
Matanee,	<i>The wind.</i>
Etoo,	<i>To rise up.</i>
Hairetoo,	<i>To go there.</i>
Hoatoo,	<i>To give.</i>
Eeapo,	<i>Night.</i>
Eahoiahoi,	<i>Evening.</i>
Oora,	<i>Red feathers.</i>
Teehe,	<i>A present of cloth.</i>
Herairemy,	<i>A place on which fruit is laid as an offering to God.</i>
Henananoo,	<i>A square pile of wicker work, or religious obelisk.</i>
Hereeere,	<i>A burying-ground.</i>
Eteepappa,	<i>The inside of a burying-ground.</i>
Harre,	<i>A house.</i>
Harre pahoo	<i>A drum-house in a burying-ground.</i>
Heneene,	<i>A wall, the wall of a burying-ground.</i>
Heho,	<i>A stone set up in a burying-ground consecrated to the Deity.</i>
Eatooa,	<i>A god.</i>
Tangarooa,	<i>The name of the god of the place we were at.</i>
None,	<i>Morinda citrifolia.</i>
Hereanee,	<i>Small twig things in a burying-ground.</i>

He,

<i>Atooi.</i>	English.	<i>Atooi.</i>	English.
Hemanaa,	<i>A house, or hut, where they bury their dead.</i>	Erahoi, dehoi,	<i>Tbin; as, tbin cloth, board, &c.</i>
Herooanoo,	<i>Wooden images in a burying-house.</i>	Pattahae, or heroui,	<i>A sort of musical instrument or rattle, ornamented with red feathers.</i>
Tooraie,	<i>A kind of head-dress, or helmet on an image.</i>	Eappanai,	<i>A plume of feathers they wear.</i>
Eahoi,	<i>Hire.</i>	Etooo,	<i>The Cordia sebestina.</i>
Pohootoo noa,	<i>A cream-coloured whetstone.</i>	Whatte,	<i>To break.</i>
Poota paire,	<i>A district at the Western part of the isle.</i>	Oeea,	<i>Yes; it is so.</i>
Eonnotaine,	<i>A short cloak of black and white feathers.</i>	Heorecoree,	<i>A song.</i>
Ottahoinoo,	<i>One article, or thing.</i>	Parao,	<i>A wooden bowl.</i>
Epappa,	<i>A board used to swim upon.</i>	Apooava,	<i>A shallow wooden dish they drink ava out of.</i>
Oneete,	<i>A kind of cloth.</i>	Etoohe, toohee,	<i>A particular sort of cloth.</i>
Heorro taire,	<i>A small scarlet bird, or merops scarlatina.</i>	Ootee, or otee, otee,	<i>To cut.</i>
Taa,	<i>An interjection of admiration.</i>	Pappaneeheomano,	<i>A wooden instrument beset with sharks teeth, used to cut up those they kill.</i>
Epoo,	<i>A bracelet of a single shell.</i>	Maheine,	<i>A wife.</i>
Eou,	<i>To swim.</i>	Homy,	<i>Give me.</i>
Tearre,	<i>Gardenia, or Cape Jasmine.</i>	Moena, or moenga,	<i>A mat to sleep on.</i>
Heoudoo,	<i>A refusal; I will not do it, or take that for this.</i>	Eeno,	<i>An adjunct, when they express any thing good, though by itself, it signifies bad. Thus they say, Era-whaeeno, good greeting, as the Otabei-teans say, Ehoaeno, or my good friend.</i>
Eorre,	<i>A rat.</i>		
Ehoo,	<i>A gimblet, or any instrument to bore with.</i>		
Epaoc, or ooapa,	<i>There is no more; it is done, or finished.</i>		
Matou,	<i>A particular sort of fish-hook.</i>		

Taboo,

<i>Atooi.</i>	English.	<i>Atooi.</i>	English.
Taboo, or tafoo,	<i>Any thing not to be touched, as being forbid. This is an example that shows the transmutation of the H, F, and B. into each other. Thus at Otabeite yams are oohe, at Tonga oofe, at New Caledonia oobe, and here taboo is tafoo.</i>	Henecoohe,	<i>An instrument made of a shark's tooth fixed on a wooden handle, to cut with.</i>
		Eea,	<i>An adjunct, as at Otabeite, to give strength to an expression.</i>
		Paoo roa,	<i>Quite done ; finished.</i>
		Ee,	<i>At.</i>
		Taira,	<i>That ; the other.</i>
		Ahoo aura,	<i>Red cloth.</i>
		Henaro,	<i>A fly.</i>
Maooa,	<i>I, first person singular.</i>	Ehateinoa	<i>What is the name of that ?</i>
Heno,	<i>Little rods, about five feet long, with a tuft of hair on the small end.</i>	Heweereweere,	<i>An outrigger of a canoe.</i>
		Mawaihe,	<i>The sail of a canoe.</i>
		Eheou,	<i>The mast of a canoe.</i>
Patae,	<i>Salt.</i>	Hetooa,	<i>The yard of a sail.</i>
Aheia,	<i>A round pearl shell.</i>	Ooamou,	<i>Fast ; secure ; sound ; whole.</i>
Teanoo,	<i>The cold arising from being in the water.</i>	Hono,	<i>To go ; to move.</i>
Tammata,	<i>The sense of taste.</i>	Matou,	<i>Fear.</i>
Ootoo,	<i>A louse.</i>	Pooa,	<i>An arrow.</i>
Ehone,	<i>To salute by applying one nooe to the other.</i>	Teeto,	<i>A bow.</i>
	<i>Ehogge at New Zealand, and Ehoe at Otabeite.</i>	Epaece,	<i>Wooden bowls made from the Etooo.</i>
	<i>A sore of any kind.</i>	Ohe,	<i>Bamboo.</i>
My,	<i>Cured ; recovered ; alive ; well.</i>	Henaroo,	<i>The swell of the sea.</i>
Oura, or ouraa	<i>A shark.</i>	Motoo,	<i>Land.</i>
	<i>The.</i>	Ehetoo,	<i>A star.</i>
		Marama,	<i>The moon.</i>
Mango,		Ouameeta,	<i>A man's name.</i>
Te and he,			
Vol. III.			

Numerals to Ten, as at Otabeite.

APPENDIX, No. VI.

TABLE to shew the Affinity between the LANGUAGES spoken at OONALASHKA and NORTON SOUND, and those of the GREENLANDERS and ESQUIMAUX.

English.	Ooonalashka.	Norton Sound.	Greenland. From Crantz.	Esquimaux.
<i>A man,</i>	Chengan	-	Angut	
<i>A woman,</i>	Anagogenach			
<i>The head,</i>	Kameak	-	-	Ne-aw-cock
<i>The hair,</i>	Emelach	Nooit	-	New-rock
<i>The eye-brow,</i>	Kamlik	Kameluk	-	Coup-loot
<i>The eye,</i>	Dhac	Enga	-	Ehich
<i>The nose,</i>	Anofche	Ngha	-	Cring-yauk
<i>The cheek,</i>	Oolooeik	Oollooak	-	Ou-lu-uck-cur
<i>The ear,</i>	Tootoosh	Shudeka	-	Se-u-teck
<i>The lip,</i>	Adhee	Hashlaw		
<i>The teeth,</i>	Agaloo			
<i>The tongue,</i>	Agonoc			
<i>The beard,</i>	Engelagoong	Oongai		
<i>The chin,</i>	Ismaloch	Tamluk	-	Taplou
<i>The neck,</i>	Ooioc	-	-	Coon-e-foke
<i>The breast,</i>	Shimsen	-	-	Suck ke-uck
<i>The arm,</i>	Toolak	Dallek	-	Telluck
<i>The hand,</i>	Kedhachoonge	Aishet	-	Alguir
<i>The finger,</i>	Atooch			
<i>The nails,</i>	Cagelch	Shetooe		
<i>The thigh,</i>	Cachemac	Kookdofhac		
<i>The leg,</i>	Ketac	Kanaiak	-	Ki-naw-auk
<i>The foot,</i>	Ooleac	Etscheak	-	E-te-ket

English.	Oonalasbka.	Norton Sound.	Greenland. From Crantz.	Esquimaux.
<i>The sun,</i>	Agadac	Maje	-	Suck-ki-nuch
<i>The moon,</i>	Toogedha	-	-	Tac-cock
<i>The sky,</i>	Enacac			
<i>A cloud,</i>	Aiengich			
<i>The wind,</i>	Caitchee			
<i>The sea,</i>	Alaooch	Emai	-	Ut-koo-tuk-lea
<i>Water,</i>	Tangch	Mooc		
<i>Fire,</i>	Keiganach	-	-	E-ko-ma
<i>Wood,</i>	Hearach			
<i>A knife,</i>	Kamelac			
<i>A house,</i>	Oolac	-	Iglo	Tope-uck
<i>A canoe,</i>	Eakeac	Caiac	Kaiak	Kirock
<i>A paddle,</i>	Chafec	Pangehon	Pautik	Pow
<i>Iron,</i>	Comeleuch	Shawik	-	Shaveck
<i>A bow,</i>	Seiech	-	-	Petick sic
<i>Arrows,</i>	Agadhok	-	-	Caukjuck
<i>Darts,</i>	Ogwalook	-	Aglikak	
<i>A fish-book,</i>	Oochtac			
<i>No,</i>	Net	Ena	Nag	
<i>Yes, or yea,</i>	Ah	Eh	Illive	
<i>One,</i>	Taradac	Adowjak	Attoufek	Attoufet
<i>Two,</i>	Alac	Aiba	Arlak	Mardluk
<i>Three,</i>	Canoogn	Pingashook	Pingajuah	Pingafut
<i>Four,</i>	Sechn	Shetamik	Siffamat	Siffamat
<i>Five,</i>	Chang	Dallamik	Tellimat	Tellimat
<i>Six,</i>	Atoo	<i>In counting more</i>	-	Arbanget
<i>Seven,</i>	Ooloo	<i>than five, they</i>		{ Arbanget
		<i>repeat the same</i>		{ Attaufek
<i>Eight,</i>	Kamching	<i>words over again.</i>	-	Arbanget mardlik
<i>Nine,</i>	Seching	-	-	Kollin illoet
<i>Ten,</i>	Hasc	-	-	Kollit.

APPENDIX, No. VII.

A TABLE of the VARIATIONS of the COMPASS, observed by Captain Cook during his passage from ENGLAND to the CAPE OF GOOD HOPE. *See Vol. I. p. 49.*

1776.		Latitude.	Longitude.	Variation.	Time.
○ July	14	50 8 N.	4 40 W.	20 18 $\frac{1}{3}$ W.	Evening.
☾	18	48 44	5 20	23 0 $\frac{5}{8}$	Ditto.
☾	22	48 35	5 36	25 4	Morning.
		44 17	8 18	22 42	Ditto.
☾	23	43 55	8 28	22 26	Evening.
☾	24	43 46	8 33	23 14 $\frac{1}{2}$	Ditto.
☾	25	42 58	9 34	23 14 $\frac{1}{2}$	Ditto.
☾	26	40 38	10 7	22 56	Ditto.
☾	29	33 51	14 32	18 31	Morning.
☾	30	33 4	14 53	19 3 $\frac{1}{2}$	Evening.
		32 4	15 4	18 24	Morning.
☾	31	31 10	15 27	18 18 $\frac{1}{2}$	Evening.
At anchor in the Road of St. Cruz in Teneriffe.					14 41 $\frac{1}{2}$
☾ August	7	23 54	18 36	15 1	Ditto.
☾	9	20 29	19 56	14 10 $\frac{1}{2}$	Ditto.
		19 41	20 29	13 23 $\frac{1}{2}$	Morning.
☾	12	15 34	23 10	9 46 $\frac{1}{8}$	Ditto.
☾	14	13 49	23 23	9 28	Ditto.
☾	15	12 21	23 34	9 48	Ditto.
☾	16	11 51	24 2	8 9 $\frac{1}{2}$	Ditto.
☾	19	9 47	22 52	9 2 $\frac{1}{2}$	Evening.
		8 55	22 39	9 25 $\frac{1}{2}$	Morning.
☾	22	6 33	20 51	10 16 $\frac{1}{2}$	Ditto.
☾	23	6 29	21 2	11 13	Evening.
		6 9	20 59	10 19	Morning.
☾	26	4 23	21 12	9 5	Ditto.

1776.		Latitude.	Longitude.	Variation.	Time.
♂	August 27	3 59 N.	21 40 W.	8 35 W.	Evening.
		3 45	22 10	8 37	Morning.
♀	28	3 37	22 23	8 36½	Evening.
		By an amplitude.		7 58½	Ditto.
♀	30	2 40	23 27	7 49	Ditto.
		2 20	24 35	6 49	Morning.
♂	31	2 5	25 12	6 33½	Evening.
		1 14	26 12	5 34½	Morning.
○	September 1	0 51	27 52	5 15½	Evening.
		0 7 N.	27 23	4 42½	Morning.
♂	2	1 13 S.	28 30	3 26½	Ditto.
♂	3	1 50	28 49	3 31½	Evening.
		2 48	29 18	3 20	Morning.
♀	4	3 37	29 24	2 55½	Evening.
		4 20	30 12	2 37	Morning.
♂	5	5 0	30 51	2 2½	Evening.
		5 34	31 49	1 21½	Morning.
♀	6	6 0	32 15	0 21½ W.	Evening.
		6 45	33 11	0 33½ E.	Morning.
♂	7	7 18	33 30	0 3½ W.	Evening.
		7 50	33 48	0 11 W.	Morning.
○	8	8 43	34 14	0 12½ W.	Ditto.
♂	9	9 1	34 14	0 18½ E.	Evening.
		9 35	34 29	0 6½ E.	Morning.
♂	10	10 4	34 19	0 40 W.	Evening.
		11 1	34 19	0 6½ E.	Morning.
♀	11	12 40	34 19	0 41½ E.	Ditto.
♂	12	13 23	34 18	0 40½ E.	Evening.
		14 11	34 2	0 16½ E.	Morning.
♀	13	14 47	34 4	1 8 E.	Evening amplitude.
		15 33	34 16	1 20 E.	Morning.
♂	14	16 12	34 20	1 23½ E.	Evening.
		16 58	34 55	2 30½ E.	Morning.
○	15	17 40	35 8	2 11 E.	Evening.
		18 30	35 26	2 16½	Morning.
♂	16	20 8	35 49	4 2½	Ditto.
♂	17	20 46	35 50	2 43½	Evening.
		21 37	35 42	2 44½	Morning.
♀	18	22 17	35 41	2 33½	Evening.
♀	20	25 54	34 37	3 32½	Ditto.
		26 47	33 55	3 16½	Morning.
♂	21	27 14	33 26	3 5½	Evening.
		27 44	32 35	2 23½	Morning.
○	22	28 19	31 51	2 1½	Ditto.

1776.	Latitude.	Longitude.	Variation.	Time.
September 23	28 36 S.	31 5 W.	2 31 $\frac{3}{4}$ E.	Evening.
	29 12	29 59	1 10 $\frac{1}{2}$	Morning.
24	29 29	29 21	1 30	Evening.
	30 4	28 8	0 31	Morning.
25	30 25	27 30	0 50 $\frac{1}{4}$ E.	Evening.
29	33 43	16 50	3 46 W.	Morning.
30	33 48	16 7	4 45 $\frac{1}{2}$	Evening.
	33 56	15 28	4 45 $\frac{1}{2}$	Morning.
October 2	34 16	12 0	7 1	Evening.
	34 16	10 2	7 13 $\frac{1}{8}$	Morning.
4	34 45	8 58	6 32	Evening.
	Amplitude.		7 52	Ditto.
	35 37	9 4	6 9 $\frac{1}{2}$	Morning.
5	35 35 $\frac{1}{2}$	9 12	6 50 $\frac{3}{4}$	Evening.
	35 49	8 49	7 40 $\frac{1}{2}$	Morning.
8	35 19	7 45	8 47	Evening.
	Amplitude.		6 59 $\frac{1}{4}$	Ditto.
	35 30	7 35	9 12	Morning.
9	35 17	7 5	8 45 $\frac{3}{4}$	Evening.
			6 59 $\frac{1}{4}$	Ditto.
10	35 39	3 47 W.	11 56	Morning.
15	34 57	8 40 E.	19 26 $\frac{1}{4}$	Evening.
At the Cape of Good Hope,			21 58 $\frac{1}{2}$	On board.
			22 14 $\frac{2}{3}$	On shore.

THE END.

This Day are published,

I. An Account of the VOYAGES undertaken by the Order of
his present MAJESTY, for making DISCOVERIES
in the NORTHERN HEMISPHERE.

And successively performed by

Commodore BYRON, Captain WALLIS, Captain CARTERET, and Captain COOK,
in the *Dolphin*, the *Swallow*, and the *Endeavour*. Drawn up from the
Journals which were kept by the several Commanders, and from the
Papers of JOSEPH BANKS, Esq.

By JOHN HAWKESWORTH, LL. D.

IN THREE VOLUMES.

Illustrated with CUTS, and a great Variety of CHARTS and MAPS relative to
Countries now first discovered, or hitherto but imperfectly known.

II. A VOYAGE towards the SOUTH POLE, and round the
WORLD.

Performed in his Majesty's Ships the RESOLUTION and ADVENTURE,
In the Years 1772, 1773, 1774, and 1775.

Written by Captain JAMES COOK, Commander of the RESOLUTION

In which is included Captain FURNEAUX's Narrative of his Proceedings
in the ADVENTURE during the Separation of the Ships.

IN TWO VOLUMES.

Illustrated with Maps and Charts, and a Variety of Portraits of Persons, and Views of Places,
drawn during the Voyage by Mr. HODGES, and engraved by the most eminent Masters.

*** Complete Sets may be had in Eight Volumes Quarto.

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF THE HISTORY OF ARTS
AND ARCHITECTURE
AND THE MUSEUM OF ARTS

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF THE HISTORY OF ARTS
AND ARCHITECTURE
AND THE MUSEUM OF ARTS

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF THE HISTORY OF ARTS

AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF THE HISTORY OF ARTS

AND ARCHITECTURE

AND THE MUSEUM OF ARTS

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF THE HISTORY OF ARTS

AND ARCHITECTURE

AND THE MUSEUM OF ARTS

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF THE HISTORY OF ARTS

AND ARCHITECTURE

AND THE MUSEUM OF ARTS

